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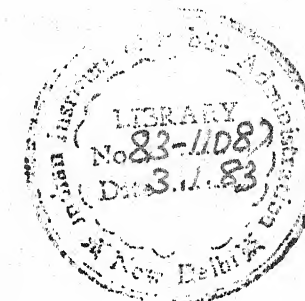
ON

SEMINAR

ON

ECONOMIC POLICY OPTION

24-25 September 1977



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NEW DELHI

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PART - I

PREFACE

The need for critically examining the various aspects of the Indian economic system and its functioning for evolving appropriate policies to ensure growth and development of the economy is of paramount importance. The present situation offers many challenges as well as opportunities.

Discussions on basic issues facing our economy have so far, essentially, remained confined to political and at best the Government level. In this situation, we had a feeling that Indian economists should participate, without inhibition, to analyse and evolve a framework for a meaningful national debate. It was in this background that we requested a group of distinguished economists to meet at a two-day Seminar on 'Economic Policy Options'. While inviting the economists we had visualized the question of growth and employment, nature of the present situation, land reforms, the role to be assigned to foreign capital, steps to reduce constitutional economic powers, mobilization of resources for stepping up investments and approach towards utilization of foreign exchange and food surpluses.

The economists were kind enough to assemble in Delhi on September 24-25, 1977 at the Indian Institute of Public Administration. We are happy that a number of economists prepared papers and some background material was also made

available to the participants of the Seminar. The economists had frank discussions on different aspects and they expressed their opinion on a large number of basic issues which are contained in a Report of the Seminar.

We feel that the conclusions of the Seminar, the papers prepared, as also the background material circulated to this group should be made available for more informed discussions to those friends who are interested in evolving a consensus on national economic policies.

We are hoping that these papers will be edited and published for wider circulation at an early date.

3, South Avenue Lane
New Delhi.

October 6, 1977

CHANDRA SHEKHAR

Seminar on Economic Policy Options - A Report

(Held on 24-25, September, 1977)

The current 'Economic Policy Options' were discussed by a group consisting of distinguished economists drawn from Universities, Government Departments and Research Institutes in a Seminar held at Delhi on 24-25 September, 1977.

The Need for
higher rate of
Savings and
Investments

The economist Group agreed that the economy, as it stands today, presents a sorry spectacle of sluggish growth. They felt that while growth performance of around 4.5 per cent per annum may be considered ambitious by some, higher growth rate possibilities existed in the economy provided there was willingness to make the necessary sacrifices. There was common agreement that the required level of investments should be about 20 percent of the Gross Domestic Product to meet the desired objectives and in fact it should be as high as 22 percent of Gross Domestic Product. It was noted that the requirement of investments for sustaining growth was quite high and that the feeling that a shift to the agricultural sector could be sustained without high investment was definitely incorrect.

The basic problems of the economy during the last decade and a half could be traced to the decline in both savings and investment rates. Such declines were partly

reversed in the period of the 4th Plan but did not reach the levels attained in 1965-66. Further, it was noted that the composition of the investments in the recent past has moved from primary and secondary sectors to housing and real estate which led to stagnation in the economy. It was felt that high levels of investments were required during the rest of this decade and early part of eighties. While recognising the need of high investment levels on account of the technological requirement of growth, a number of participants pointed out that better utilisation of existing capacity, and shifting of the emphasis of agricultural growth from few concentrated regions to other areas, could lead to a more favourable investment-output relations.

Heavy Industries and Growth

The seminar viewed with concern the opinion held in certain influential quarters that heavy industry has an insignificant role in the strategy of development, and emphasised that the development of our capacities in steel production (as input in the rapid growth of the heavy investment sector itself and for a wide variety of inputs, which are required for agricultural intensification) cannot be ignored without adversely affecting the goal of self-reliance and the long-term prospects of growth. If development of heavy industry in the past has not yielded the desired results it is because that the rate of plough-back

was low, and among other causes and it was also due to distorted price policies of the public sector industries.

Exchange Reserves

The high level of foreign exchange reserves should not create a false confidence amongst the planners to opt for relaxation of quantitative physical control on imports and adopt sto-go policies. Such an approach, if adopted, could adversely affect the prospect of sustained high investment rate in the economy.

The group was firm in concluding that vast possibilities exist in giving an upward thrust to the economy by considerable expansion of public investments through utilisation of foreign exchanges. A number of areas in which foreign exchange reserves could be utilised so as to achieve the goal of self-reliance were identified. Development of power projects, fertilizer, shipping, nuclear energy and oil exploration, were specifically mentioned. The possibilities of using foreign exchange to build up buffer stocks in items like cotton and edible oils, in which price fluctuations have been considerable, were also suggested. The upward thrust in public investment will help fuller utilisation of capacities in industry and generate a demand for wage goods.

It was emphasised that investment for agricultural development should be through massive irrigation and soil development programmes, related public works, programmes of

power development and electrification and associated input producing industries. It was added that since in many of these sectors long gestation lags were involved a long-term view would have to be taken for planning of investments.

Domestic Resources

Domestic resource mobilisation was isolated as a critical constraint. The need for managerial autonomy in the public sector to permit the charging of economic prices for better services particularly to the agricultural sector was emphasised. It was pointed out that high interest subsidies were both a drain on the public exchequer and also had negative effects on the demand for labour. In general the consensus was that bold programmes for investment options were possible and that the inflationary scare should not be used to stand in the way of such programmes.

Public Distribution

Public Distribution, it was considered, was an essential concomitant of an expanded programme of public investment. The Group noted with concern that the public distribution system remains confined, by and large, to urban centres and the bulk of the rural poor, the landless labour and small farmers were in fact not covered by the public distribution system. References were made to the estimates of the National Commission of Agriculture and the need for enlarging the quantum of foodgrains to be routed through public distribution. As regards the question of high cost of public distribution, while recognising the

need for reducing the cost of public distribution through organisational improvements, the group emphasised the benefits that accrue to the society as a consequence of stabilisation of prices of foodgrains and also in relation to the protection of the weakest sections of the society. It was maintained that public authorities should not be unwilling to subsidise the public distribution system for the benefit of the weakest sections of the society.

The argument that private trade is relatively more efficient to public trade does not remain valid if social costs and its speculative profits are taken into consideration. Past studies show that private profits were high and rising in the absence of public distribution channels. Public distribution system must be expanded to the national level to cover commodities like cereals, vegetable oils and textiles so that a substantial part of a poor man's consumer budget is protected. It was mentioned that public intervention, when resorted to by only a State or two, could add to the problem of the rest of the States.

New Orientation to Planning

It was pointed out that the planning in the past years was more related to the needs of the organised sector of the economy than the unorganised sectors and the poorer sections. The objectives, instruments, policies and even some of the concepts of planning would need to be revised if the benefits of planning have to be directed for the

less privileged sections. In fact the whole focus of planning needs a change.

The economists agreed that it was not possible for the country to achieve the objectives of higher agricultural production and generation of adequate opportunities for rural employment and meeting basic immediate needs unless adequate attention was paid to the institutional mechanisms involved in the Indian agriculture. It was shown that careless use of statistics some times leads to inferences that size of agricultural land ceiling could be raised. The Seminar generally agreed that the existing land ceilings at 18 standard acres needs to be enforced very strictly. Also the possibilities of reduction of these ceilings, at least in some areas of the country should be examined very carefully. It was also discussed whether the objectives of redistribution of land could be further supplemented by providing interest free loans for purchase of land to the landless and the marginal farmers. It was generally agreed that land should be available only to the tiller. It was felt that time has come to abolish absentee landlordism.

There was considerable discussion on the role of caste factors in India's rural society. According to one view such factors constrained the possibilities of institutional change. However a number of participants noted the role of political processes in overcoming such constraints.

The political process should mobilise smaller farmers and landless labourers. It was generally argued that the employment potential of the Indian agriculture was being under-estimated. If programmes for agriculture development are properly oriented there was considerable scope to generate large employment opportunities within the rural framework. It was felt that if agricultural and institutional changes are not undertaken it would not meet the objective of larger employment and egalitarian growth in rural areas. It was emphasised that if institutional changes in agriculture are to be brought about then the tendency towards the use of organised violence against disadvantaged groups needed to be strongly countered by political and state actions. It was recognised that representatives of the landless labourers should be associated with the process of land redistribution. The aims of meeting basic minimum needs, and generating employment on a required scale may not be fulfilled unless the system was capable of redistributing land and increasing the capability of landless labourers through appropriate organisational changes. The results of some studies were discussed in this connection.

It was added that increase in the demand for labourers and expansion of employment opportunities could help create

better environments for distribution of land and incomes. The need for increasing the skill level of the disadvantaged sections of the community was emphasised in this country. The results of various studies indicate that adult literacy and primary schooling programmes had failed particularly in the case of landless labourers, small farmers, harijans, tribals and other weaker sections of the country. In this regard the Seminar felt that political parties and voluntary groups could play an important role in supplementing state efforts by the States for liquidation of illiteracy through national adult education programmes.

Agricultural
Growth

The enormous constraints on development of agriculture economy were noted. In 2/3rds of rice area the growth rate in the past decade and a half was zero or negative. High rate of growth was achieved mainly in wheat and particularly in a few inferior cereals. For spreading modern technology to new areas a number of difficult questions have to be dealt with. For instance it is necessary to develop proper varieties of paddy which could be introduced in big river deltas. Similarly along with creation of conducive institutional conditions important questions were that of drainage and efficient water management. It was suggested that for implementing drainage schemes the state should have the right to acquire private land as in the case of acquisition of land for public utilities. The Seminar noted that

with the decline in the changing size of holdings the problem of access to inputs for intensive agriculture were likely to become more acute. The participants strongly felt that public investments in agriculture should be stepped up substantially. In this regard it was specifically mentioned that the past strategy of concentrating on private investment, private irrigation through institutional funds, in concentrated regions and for selected groups of farming population suffer from a number of limitations. The new agricultural strategy should ensure a better geographical spread of growth, give priority to public investment, particularly in irrigation, and ensure extension of technology and management.

Industrial
Policy

The Group discussed the perspectives against which industrial policies could be effectively implemented. The major question in relation to perspectives are: (i) decisions on the appropriate basket of consumption goods, we should not plan for a basket of goods obtaining in the developed world. (ii) Decisions on pricing of capital; low rates of interest and liberal allowances to capital only lead to adoption of capital intensive options instead of labour intensive technology. (iii) Decision on responsibilities for capital accumulation, we have to decide clearly that since one cannot rely on private corporate sector we must

place greater reliance for capital accumulation in public sector; and (iv) Decisions on ownership structure towards lower degree of concentration and also towards socialisation of investment. The Group recommended that the nation must have clarity of approach on the above mentioned perspectives. Ambivalence would only lead to distortions and failures in achieving the basic national objectives.

Several instances where public policy has resulted in wrong priorities and favouring of capital intensive technology were cited. It was surprising that in India, according to the current fiscal policies motor cars and air conditioners are not considered items of lower priority whereas fans, household furniture continue to be so. The scheme of investment allowances which is made applicable to almost all the industries tends to result in a distorted choice of techniques.

Multinational Corporations

The group discussed in depth the pros and cons of associating multi-nationals. The group took the view that there were over-riding disadvantages to the economy like infiltration into strategic positions in the Indian economy, re-inforcement of Indian monopoly capitalism, exercise of political influence, promotion of capital intensive technology, distortion of wage structure and above all the danger of the country being turned into an appendage economy. It

noted that the association of multi-national in the past had resulted in development of a host of trivial industries like tooth-paste. The group was firm in expressing its strong reservations, if not outright rejection of multi-national corporations. It was felt that to some extent, the demand for foreign technology arises out of wrong management. It was noted in this context that there should be an effort in developing indigenous technology and our scientists and technologists should have opportunities to experiment with indigenous technology.

It was felt that the pragmatic and ad hoc approach to foreign capital has not worked in the past and what is required is outright purchase of foreign technology which has become possible as a result of comfortable exchange reserves. Foreign equity collaboration should not be encouraged.

Rolling Plan & Decentralization

The Group discussed the concept of the rolling plan. Though it was agreed that it was only a technical change over number of participants expressed fear that rolling plan would dilute the planning discipline and accountability. It was generally felt that the rolling plan concept was adopted without proper public debate. Regarding decentralised planning it was pointed out that it would not become useful mechanism if beneficiaries at the local

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levels do not participate in plan formulation. Participants emphasised the need for intertwining sectoral and regional plan. They expressed concern at the widening of regional disparities in the country and it was pointed out as an illustration that if this trend is contained the disparities between Punjab and Orissa after about 20 years may become as wide as between India and Germany.

On resource mobilisation it was felt that the problem of rupee resources tended to get exaggeration because of the way cost estimates are prepared. Several participants emphasised the need to look at resource requirements in terms of real resources viz. foreign exchange and labour both of which, at present are readily available. Attention was drawn to the rapid increase in non-plan expenditure. It was felt that a substantial volume of resources would be mobilised by attacking the problem of tax evasion.

Fiscal Policies

On fiscal policy attention was drawn to the fact that our present tax structure does not reflect plan priorities and tends to subsidise capital-use even in low priority industries. The possibility of using a tax on mis-investment and misconsumption to regulate the pattern of production was mentioned. The loss of revenue by way of subsidies was mentioned. The need for export subsidies at a time when foreign exchange reserves are accumulating was questioned.

Pricing Policy

The difficulty in restraining increases in the prices of essential commodities was discussed. Some participants felt that as long as production response is determined by market forces, it may not be feasible to guarantee availability and low prices simultaneously. This may be particularly difficult where small units are involved. However, it was felt that there were several cases where prices increased not because of normal market response but because of market power included by a small number of firms. In some such cases this had happened even though inputs were supplied by the State at less than market prices. It was felt that in such cases legal measures would have to be used fully. In this connection it was pointed out that in many cases prices are controlled informally rather than under the legal powers under the Essential Commodities Act.

Self Reliance

The Group underlined the over-riding need to achieve self reliance in the context of worsening of energy crisis. It was pointed out that all studies indicate that by mid-eighties the world supply of energy sources would fall short of the demand. Projects indicate that in another 20 years the prices may assume serious proportions. It was felt that national autonomous growth of Indian economy should be strengthened to ensure that the country is insulated to the maximum extent possible from

the impending crisis of western economies. It rejected the export-led strategy of growth for this country.

Participants The participants included Prof. C.T. Kurien (Madras University); Prof. Gautam Mathur (University of Allahabad); Prof. D.D. Narula (Indian Council of Social Science Research); Prof. T.S. Papola (Giri Institute of Development Studies, Lucknow); Prof. G. Parthasarathi (Andhra University, Waltair); Prof. Pradhan H. Prasad (A.N. Sinha Institute); Prof. C.H. Hanumantha Rao (Institute of Economic Growth); Prof. Balwanth Reddy (Administrative Staff College); Prof. H.K. Paranjape (formerly Member M.R.T.P. Commission); Dr. Bhai Mahavir & Dr. S.B. Gupta (University of Delhi); Prof. Y.K. Alagh and Shri Natin Desai (Planning Commission); Prof. A.K. Bagchi (Centre for Study of Social Sciences, Calcutta); Prof. G.S. Bhalla, Mrs. Sheila Bhalla and Prof. M. Raza (Jawaharlal Nehru University); Prof. K.S. Gill (Guru Nanak University, Amritsar), Prof. R.N. Haldipur, Prof. S.K. Goyal and Dr. K.N. Kabra (Indian Institute of Public Administration); Dr. Bimal Jalan (Ministry of Industry); Dr. Vijay Kelkar (Ministry of Commerce); and Dr. Anand Gupta (Institute of Public Policy Analysis). General Secretaries of the Janta Party Shri Madhu Limaye, Shri Nanaji Deshmukh, Shri B.S. Nahar and Shri Rabi Ray also attended the Seminar.

SEMINAR ON ECONOMIC POLICY OPTIONS
(24-25 September, 1977)

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SEMINAR ON
ECONOMIC POLICY OPTIONS

ECONOMIC ISSUES BEFORE THE NATION

by
Chandra Shekhar

September 24, 1977

Delhi

I am grateful to you for accepting our invitation to attend this Seminar. To an expert audience of this type, I cannot pretend to analyse the nature of our economy and society in any detail. It is, however, of some importance to appreciate the requirements of the country from intellectuals and technical specialists. As a political worker, the best that I can do is to outline such requirements of our society at its present historical juncture.

2. The demands of our people and their aspirations in its essence, to my mind, are basically two-fold. First and foremost, they desire and legitimately demand work and employment and the right to lead a decent life with at least their minimal simple needs met. Our people, in the main, have not reached a stage where their requirements are very complex, but it would be very wrong for anybody to assume that the vast majority of this country shall continue to live in an economy which is well endowed with all resources and yet even their simplest requirements

of food, shelter, clothing and education and health continue to remain unfulfilled. If a social system cannot meet these requirements under Indian conditions, it can only be called wasteful and inefficient and such waste and inefficiency cannot be tolerated any more. The second need of a vast majority of us is that the country should follow an autonomous pattern of national development. Our people, particularly the young, demand this right. Their need is not only of work and employment, but also for opportunities to participate in the building up of a nation which can justifiably hold its head high and play an independent role in the world of today. This has been the tradition of our freedom movement and it has been inculcated into us by the great national leaders, such as Gandhiji and Pt. Nehru.

3. I feel that these two requirements of our people should be met if the democratic system is to survive. Those who believe that we can depend on the rest of the world and meet the income and employment needs of our masses, are mistaken. Imported capital, imported technologies

and foreign savings on a large scale make nations dependent on others. International capital operates in the search for profit and with the need to use the untapped natural resources of large poor countries like our own, for their own betterment and the betterment of the well-to-do world. The need for planning arises so that a poor country like India, with a long colonial history of exploitation, can order the use and development of its own resources for the benefit of the mass of her own people.

4. This Seminar should, therefore, give some attention to these problems in more concrete terms. Why is it that we are not able to give adequate work to our people and to meet their basic needs? Is it due to the fact that our total investment effort was inadequate or is it also due to the fact that not enough investible resources were spent on meeting essential requirements, which lie basically in the field of agricultural transformation, local planning and investment in education and social development? In addition to resources, why is it that the people themselves

do not involve their own contribution to the extent that is necessary and desirable to supplement the efforts of the state? Is this because they perceive that the benefits do not go to them, or is it because of the faulty design of our policies? How is it that we have not been able to integrate the fruits of modern science and technology into the production and distribution processes which affect the mass of our people? These are questions to which answers need to be found.

5. As regards the urge for autonomous national development, again have we followed the correct mixture of policies, such that our own national interest is safeguarded today and in the future; and also are we following the policies with which the possibilities of further Indian national development are fully maintained because this much we owe to the country and to the future generations.

6. A study of the past is helpful to the extent that it leads to concrete analysis of our performance and our mistakes. There is no question that the transformation of the Indian economy shall need more investible resources in the future. What has

been our performance in the past? If you find that not enough was accumulated and invested, the next question is - why was this so? How have we asked the different sections of our community to bear the burdens of our national development? To take an example, in 1974, the set of policies that was implemented to control inflation included draconian measures for wage control. The railway strike was suppressed. Subsequently, however, the dividend restrictions on profits were withdrawn. In 1975, rates of income-tax were changed and tax evaders were asked to declare their past incomes. What was the rationale of all these concessions? Has the performance justified adoption of these policies? What is the policy that we have of asking different sections of the population to contribute their share to the requirements of national development?

7. This then means that the gains of productivity have to be shared equitably between wage-earners and capitalists. This in essence is the idea of a wages-incomes policy which under our conditions has also to be related with the questions of agricultural price stabilization, procurement and a strengthened public distribution system. The notion that in a good

agricultural year the distribution of foodgrains, cotton or oilseeds, should be handed back to the trade, but that in poor years, imports can meet the needs of public distribution and price stabilization, needs to be questioned critically. What are the steps necessary to strengthen the public distribution system at the grass root level. Such steps are far more important than a generalized discussion of this subject at the national level.

8. From all accounts more than a third of our population does not get enough to eat, while the proportion of the poor is still higher. Per capita availability of inferior cereals and inferior cloth has been falling. In many areas about two thirds of the children of vulnerable sections do not go to school, or if they do so, they drop out very soon. The question of adult illiteracy seems to have been forgotten. The rate of growth of non-essential commodities is, however, quite high. What is the nature of production planning, of taxes and of subsidies? Have we to change it? Studies show that our housing programmes in the public sector

subsidise the middle class more than the poor. In perhaps a large number of government services, the very needy are relatively ignored. Why are these issues not at the heart of our public discussion? What is the nature of planning which will help us to achieve the desired objectives?

9. Economists need to answer these concrete issues. Gandhiji wanted the poorest to be our benchmark. However, generally economists tend to avoid basic issues by talking of "assumptions" and the "Political economy" constraints. This way each one of us avoids his own responsibilities. Most certainly as regards the Janata Party, I can say that basic thinking on these issues is imperative for its very existence.

10. It is by now fairly well known that while our country is rich in natural resources, in many critical areas we just have enough, at least according to our present information, to meet our own needs today and in the not-too-distant future. However, a few years ago, explicit decisions were made to canvass abroad for large projects which had very little benefit, apart from processing our scarce mineral resources and

attaching them to the needs of foreign countries. Is this policy justified? Should it be extended or should the whole problem be looked at from a different angle? We are being told that we are today in a position of surpluses of foreign exchange. But is enough attention being paid to meeting the requirements of the development of our people in the future? It does not need very great expertise to see that planning for employment and basic needs has also to provide for the requirements of construction and of investment goods on a very large scale for a country of our size. Are these needs being looked into properly or shall we be jeopardising in the not-too-distant future the prospects for autonomous national development? The foreign exchange reserves of the country have been built at some cost. Hundreds of crores of rupees are spent on subsidizing exports. The subsidies come from a tax system which is well known to be inequitable. Such reserves should obviously not be used for purchase of Boeing aeroplanes for our VIPs or luxuries for the elite, but should be used for building up the sinews of the economy.

11. Imperatives of fast development and employment generation, require that modern technology has to be nurtured jointly with a revived household industry linked with our agricultural plans. Our capacity in design, fabrication and production of equipment and machines has to be encouraged, fostered and harnessed to the needs of the national development, rather than belittled. We need to reinforce the capability of the nation to meet the challenges of the international environment with increasing vigour.

12. Scientific attitude needs to be encouraged. The approach enunciated as early as the National Planning Committee, of the pre-independence days, that it is only with the application of modern technology on a wide scale that the scientific temper can be propagated, is as valid today as it was then. This Seminar should pay attention to the problems of both the nature, content and magnitude of technological change regarded as essential, as also the educational processes which will hasten its propagation and acceptance on a mass scale.

13. Planning for the poor cannot be divorced from large scale investment in dams, land and water development and infrastructure. Even today our

communication systems link hinter-lands with port towns and vast areas with huge resources and populations remain underdeveloped. I am only making the point that the stage has yet not come for India to fritter away her scarce resources. It is sometimes argued that the economy has already reached high levels of savings and investment. I am told this rate has crossed 18 per cent of GDP. We have food reserves and foreign exchange reserves. All the 'difficulties' and 'constraints' the economists talked about do not seem to be there. Why cannot we mobilize the nation for decisive advance? The difficulties seem to be with the elite and the policy maker and our ability to organize big changes, rather than with the system and its other not-so-well-off constituents.

14. Our society is no longer stagnant. Its dynamism has acquired a new dimension since people of this country overthrew the authoritarian regime. The people are impatient. They are in no mood to remain satisfied on promises. They want to see some concrete action in the interest of those who were so far neglected. They are willing to work for it and fight for it, if necessary. They are ready to make sacrifices provided

the lead comes from those who are privileged. If the attitude of preaching patience to the poor persists it may prove perilous. I hope you share this sense of urgency and I request you to give your view on all these issues without any inhibition, and give a policy frame-work which may ensure willing cooperation of the toiling masses and orderly peaceful development. It is a stupendous task but we look towards you with hope and expectation that you would realise your crucial role and responsibility in this respect. Being conscious of the constraints that operate in political circles we approach you for guidance and help. Hope you will not disappoint us.

Thanks.

Seminar
on
Economic Policy Options
(24-25 September, 1977)

Decentralised Planning: Some Questions

By

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Venue: Indian Institute of Public Administration
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DECENTRALISED PLANNING: SOME QUESTIONS

It has been claimed that the new emphasis on planning will be on decentralisation. The purpose of this Note is to bring out some of its implications and to pose some questions which must be examined in relation to it.

On the whole planning in the country so far has been rather heavily centralised in that the whole process of plan formulation rested with a small group under the administrative jurisdiction of the Central Government. It could, of course, be argued that although the plans were drafted by small groups directly related to the Central Government, the final approval for a plan was given by the National Development Council whose main constituents are the Chief Ministers of the States, so that the plans also had the sanction of the States. Similarly, in drawing up a plan an important step is the discussion that the Planning Commission holds with the State Governments which, again, may be thought of as an element of decentralisation in the planning process. However, all these concessions to the States have only been tokens of the good intentions of the planners at the Centre.

A certain kind of decentralisation has also been initiated in the past. Most State Governments have their own Planning Boards which, apart from determining the pattern of allocation of funds granted by the Centre, have

also been addressing themselves to the specific economic problems of the States. One state, at least, has a Planning Commission of its own (Tamil Nadu) which has produced a Perspective Plan for the State. A similar exercise has also been done by the Planning Board of Gujarat. The Tamil Nadu document also provides for planning at the District level which can be taken as another step in this kind of decentralisation.

The procedure represented here is the representation of more and more administrative units in the planning process. And since the pattern has been a movement from top to bottom, from higher level administrative units to lower level ones, it may be considered as a sort of decentralisation. Its main characteristic is administrative devolution.

The first question to be clarified is whether the new decentralised planning process that is now being talked about is just one more step down the line, let us say, taking planning to Block and village level administration also. If this is the case, there is really nothing new in it, and in any event, it is an administrative issue, not a planning issue. If "decentralised planning" is to have a different connotation, it must be viewed primarily as a planning concept.

Planning implies at least two kinds of decisions which can be referred to as "substantive decisions" and "decisions of coordination". The substantive decisions are the ones that relate to actual processes of production, consumption etc. These decisions are made and implemented by what may be called

"the primary units" of the system - farms, firms, households and the like. The main feature of a primary unit is that it is responsible for the formulation and implementation of its plans or decisions. A primary unit, then, is one where there is no separation between decision-making and execution of decisions, or between plan formulation and plan implementation. An economic system consists largely of primary units, but there are usually also some non-primary units whose main economic responsibility is the coordination of the decisions of the primary units. "Coordination of the decisions of the primary units. "Coordination" here is used in a very broad sense to include all aspects of policy formulation i.e., decisions regarding what should be done, as well as evolving procedures to get the primary units (which alone implement the decisions) to execute the decisions. These procedures involve giving information, offering incentives and assistance, issuing directives and orders - in short the whole gamut of channels to convey information and of measures to influence decisions. These may be referred to as "the information and control mechanism" of the system (I-C mechanism, for short). A simple planning system may, therefore, be thought of as consisting of a set of policy making units, a set of primary units and an I-C mechanism linking the two.

Within this frame it is possible to distinguish between the planning concepts of centralisation and decentralisation. A completely centralised plan may be defined as one where the I-C mechanism is a one-way traffic of directives from the policy making units to the primary units, where, in fact, the policy

making unit formulates the plan and the primary units implement it on the basis of directives from above. Because no policy making unit can issue directives to primary units without knowing what their requirements and possibilities are (i.e., without the I-C mechanism becoming in effect some kind of a two-way traffic with directives from the policy making units to the policy making unit) completely centralised planning can only be a limit case useful mainly as a conceptual tool. However, from it can be derived the operationally meaningful concept of "heavily centralised planning" where although the primary units may send up their reports to the policy making unit, the "what to do" and "how to do" decisions are all made by the policy making unit and sent down to the primary units as directives.

It is not necessary that in this process the policy making unit must send its directives directly to the primary units. It may set up intermediate "relay units" to decode its directives and send them down to the primary units. There may also be several layers of relay units: that is essentially an administrative question. But one thing must be clear. If planning is "heavily centralised" as defined above, it cannot be changed into decentralised planning by merely setting up a chain of relay units even if the relay units are successively closer to the primary units.

Decentralisation as a planning concept must be different. Its essence consists of the primary units themselves deciding on a large number of "what to do" and "how to do" questions,

i.e., the primary units being involved in the Plan formulation process, not merely the plan implementation process. If this is to happen, then the I-C mechanism of the system must also function differently. It is not only that reports from the primary units must come to have a more prominent place; it means also some horizontal channels being developed for interprimary unit contacts. Further, the relay units of the system also will have to be viewed in a different perspective. They cease to be mere transmitting units and must become active coordinating units coordinating both the vertical and the horizontal aspects of the I-C mechanism.

Thus the shift from a centralised to a decentralised planning procedure is a major qualitative transformation of the entire system involving the primary units, the relay units, the policy making unit and the I-C mechanism. What needs to be examined is whether the proposed "decentralisation of planning" is geared to bringing about such qualitative transformation of the system.

Some of the implications and requirements of that transformation must be spelled out to see whether what is usually referred to as "decentralisation" is in fact a move towards decentralised planning as described above or a mere administrative devolution within the framework of centralised planning as discussed earlier.

An important aspect of our planning procedure is that the primary units of our system have no formal place in it. In this respect our planning has been different from what obtains

in socialist countries such as the USSR and Yugoslavia, and similar to the French planning processes. Within a socialist frame work, planning (whether centralised or decentralised) can be effective only if it is "addressed to" the primary units. This is primarily because when the plan is finalised and targets of production are set, these are specified in terms of targets for each of the primary units and the fulfilling of the targets is a legal obligation for the primary units. When the planning process is heavily centralised (as it was in the USSR in the initial stages of planning and almost upto the Reforms of 1965) what happens is that the directives from the policy making unit to the primary units tend to become arbitrary imposing heavy burdens on them. Implementation of the plans then had to be achieved by the policy making unit exercising authority over the primary units not only through its control over the I-C mechanism, but also by using the political authority that the policy makers under such circumstances have over the primary units. In this context decentralisation (as it happened in the USSR with the Reforms of 1965) is an indication of the policy making unit's ability to direct the system substantially through economic measures incorporation in the transformed I-C mechanism.

As against the unavoidable link between the policy making unit and the primary units in socialist economies, French plans are never "addressed to" primary units. They are related to branches or sectors of the economy such as electricity, steel, cement, transport etc. Not that primary units are totally

excluded from the planning process. On the contrary, the plan formulation itself is done by the representatives of the primary units, particularly the business community. It has been claimed that the French plans are virtually forecasts of business intentions, " a general market survey for the economy as a whole" which business concerns are happy to have. Since the objectives and priorities of the plans are set by the business community itself, all that is necessary for implementation is to adapt the I-C mechanism to the fulfilling of these objectives. Policy makers reach individual primary units only through the operations of the I-C mechanism.

In India the business community has not been given the kind of overt representation in the planning process as in France. Neither have our plans admitted that the objective of planning is to assist business interests to accelerate their growth. On the contrary the professed aim of planning in the past was to achieve a socialist pattern of society which, according to the Second Plan document meant that "the basic criterion for determining the lines of advance must not be private profit, but social gain." But in deciding not to address themselves directly to the primary units, our plans had proceeded on the assumption that the system could be directed to avenues of social gain rather than private profit by the policy makers, control over the I-C mechanism. The plans were, thus, allegedly formulated by those "informed by social purposes" who also claimed that they had a vast array of instrumentalities - taxes, controls, licences etc -- to achieve

their objectives.

But the actual working of the system during the past quarter of a century has shown that the effective control over the I-C mechanism is not exercised by planners or policy makers, but the private profit makers, particularly the bigger ones among them who have turned practically all policy measures to their own advantage. The working of the licensing system gives the best example of this phenomenon. What happened to the licensing system was not an exception, but only the most glaring example of what is fact has been happening no matter what the intentions of the policy makers have been.

The proposals to decentralise planning must be viewed against this general background. The following specific questions must be discussed to probe into what the proposal implies:

- (i) Which are the primary units to be brought into the decentralised planning procedure, especially in the formulation of the plan?
- (ii) What kind of controls do policy makers envisage over the I-C mechanism, and how is it to be changed to serve decentralised planning?
- (iii) What are to be the relay units in the new procedure and what is to be their role?

We shall examine these questions briefly.

Primary Units. The role of the primary units in decentralised planning has been discussed already. To repeat, there is no decentralisation of the planning procedure unless the primary units are explicitly taken into account, particularly in the formulation of the plan. The decentralisation discussion

currently is also related to some locational considerations and the impression created is that the attempt is to involve primary units in the rural areas (Blocks, villages etc) into the planning process. But the bigger primary units in the rural areas (large farmers, for instance) are already indirectly involved in the planning process as those for whom the plans cater to. So it is important to spell out whether the decentralisation that is proposed is meant to give them open and official representation in the planning process. At times it is also made out that the purpose of decentralised planning is to incorporate the small producers or primary units into the planning process who, under normal circumstances, do not get an opportunity ~~to~~ of "perceiving and participating in the immense possibilities of growth through organised effort". If this is indeed the case, it is necessary to spell out how differential treatment to the smaller units is in fact to be achieved. This is particularly so because in the past special schemes designed for the benefit of smaller units either did not materialise or were subverted by the larger units to their own advantage.

The basic question pertaining to the primary units to be brought into the proposed decentralised planning procedure is not their location or size, but their economic characteristics. Are the primary units to be linked up directly into the planning process through decentralisation geared to the principle of private accumulation or not? If they are, then decentralisation can only serve the purpose of giving legitimacy to the existing

propensities and proclivities of the system and take it further and further away from any objective of "social purpose".

To sum up, it must be clearly stated that unless the proposal to decentralise the planning procedure is also accompanied by attempts to set up and build up primary units whose objectives are not private accumulation, it must be viewed as only a subtle measure to reinforce the aggressive and expansionist tendencies that now lie latent in the system and hence a very dangerous procedure.

I-C Mechanism: As mentioned already, planning of the past has led to a small group of large private profit makers tightening their grip over the entire system because of the increasing control they have come to have over the IC mechanism. An attempt to decentralise planning without substantially altering the character of the I-C mechanism, therefore, will only give them wider opportunities to make further inroads into the system. The pattern of the past has been that whenever the State has moved in with its resources, the large private profit making primary units have followed to take advantage of the new situation. If decentralised planning is partly also an effort to reach the less organised segments of the economy, then, unless the State can exercise much greater control over the I-C mechanism so as to shut out the bigger sharks, decentralisation will inevitably make the relatively weaker sections more vulnerable. Hence those who exposes decentralisation

have the responsibility to spell out the manner in which the existing pattern of the I-C mechanism is going to be altered. Credit and trade are two aspects of the I-C mechanism easily "taken over" by the large private profit making primary units. And so, a clear policy statement about credit and marketing policies is a necessary complement of the proposal to decentralise planning.

Relay Units: Relay units which bring together primary units and link them to higher level policy making units have a very positive role in a decentralised planning procedure. Hence if decentralisation of planning is to be taken seriously the composition and function of relay units must also be clearly spelt out. This is particularly so because a mere administrative devolution of a heavily centralised planning procedure can frequently be mistaken as decentralisation of planning. When this happens the mere creation of relay units may be thought of as necessary and sufficient condition for decentralisation. As mentioned already this has been the pattern of the past. State level Planning Boards or Planning Commission have been set up which indulge in the same kind of futile futuristic exercises done by the Central Planning Commission. Now that these have proved to be ineffective, the proposal is to go a step or even two down and to set up more agencies to do similar exercises. If these new relay units at the District, Block and Panchayat levels have no new and different tasks to perform, they will only increase the time and distance between the primary units and the policy makers

causing delays and inviting corruption. If decentralised planning is taken seriously the main function of relay units at each level will be to see that the primary units at that level decide and do what they can within a broadly defined pattern of priorities and that only that which is necessary but cannot be done at that level is pushed up. Decentralised planning will thus necessitate new kinds of relay units that will coordinate decisions horizontally and do further "filtering up" and editing processes. There is no reason to believe that these functions are best performed by the usual civil and revenue administrative units. New agencies, will have to be created for the new tasks.

One final point. If many primary units in a locality are brought together to decide on the "What to do" and "How to do it" questions, the conventional boundaries between economics and politics are bound to break down. In other words, genuine decentralisation is an invitation to people to use the power that truly belongs to them. If taken seriously, therefore, it is sure to witness many acts of creative destruction. Is there enough political wisdom to accept this as a fact and to channel it along a well defined path of social transformation?

(Restricted Circulation)

Seminar
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Saving and Investment in Indian Economy

By

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SAVING AND INVESTMENT IN INDIAN ECONOMY

It need hardly be emphasized that fast economic growth is a necessary pre-condition for the realisation of the objectives of eradication of poverty as well as diversification of the economy. A stagnating under-developed economy cannot give any hope for the future. The size of the cake must grow fast for any meaningful sharing of it. This is specially true for the under-developed countries where because of low labour productivity, the size of the cake is pitiably small. However, it need be stressed that fast growth rate though a necessary condition is not a sufficient condition for eradication of poverty and unemployment. For this, the growth process has to be properly oriented and institutional measures taken to ensure that the gains of development are not monopolised by a very small section of the privileged population who have to start with a command over resources.

Besides other human and institutional factors, growth of an economy is crucially dependent on the rate at which it can undertake capital accumulation. Technically speaking, given a capital output ratio for the economy, the rate of investment will determine the rate at which the economy will grow. There existed for quite sometime a misconception that capital output ratio can be very low in developing countries. This has proved to be quite wrong. It is not only primarily due to - as is often

alleged - a craze for adopting capital intensive technology. The causes for this are much more basic. Unlike what was commonly believed earlier, the incremental capital output ratio in agriculture is fairly high and is rising at a fast rate. The major reason for this is that in labour surplus and over populated countries, the scope for increasing output through increase in area is getting very limited. For example, in India, during the fifties, the contribution of productivity to total growth was only 30 per cent and area increases contributed as much as 70 per cent. During the sixties, on the other hand, area increases contributed only 30 per cent and productivity increases as much as 70 per cent of the total increase in output. The conclusion is inevitable that if agriculture in India is to grow at a rate of 4 and $4\frac{1}{2}$ per cent as envisaged in the plan, a much larger existing area has to be brought on the irrigation accompanied with intensive agricultural practices like the use of fertilisers, insecticides, pump sets, tractors etc. These modern inputs are basically highly capital intensive and hence inevitably lead to a rise in incremental capital output ratio in agriculture. Furthermore, productivity increases being a key to the growth process, capital intensity tends to rise in all the sectors, as the developmental process gets accelerated.

The purpose of this brief note is to examine the behaviour

of savings and investment in India since 1960-61 in the context of its past performance and future prospects of growth.

For this, it is important to roughly relate the rate of capital formation with the growth rate of net domestic product in India. For this, it might be more useful to look at rates of capital formation at a percentage of NDP at market prices at constant 1960-61 prices. If one looks at the data upto 1975-76, one is struck by the fact that in real terms, the highest rate of capital formation of 16.8 per cent was achieved during 1966-67. Although during the seventies, the trend rate of capital formation is higher than that during the sixties, the highest figure that was achieved during 1974-75 was only 15.1. This got reduced to 14.7 during 1975-76 and all indications are that it would be slightly lower during 1976-77. The fact that we have not so far been able to achieve the rates of capital formation which were obtained in 1966-67 is highly disturbing. If we take the period 1960-61 to 1975-76, we discover that the average rate of capital formation has been nearly 13.44 per cent per annum. According to the national income data, the NDP at market prices recorded a growth rate of 3.72 per cent per annum during this period. This gives a capital output ratio of 3.61:1 for this particular period. This compares with an incremental capital output ratio of 3.75:1 estimated

by the Planning Commission. It is very likely that this ratio will be in the neighbourhood of 4:1.

In other words, to achieve a targeted growth rate of 5 to 5.5 per cent, we need capital accumulation at the rate of 20 to 22 per cent (net domestic capital formation as a percentage of NDP at market prices both calculated at 1960-61 prices).

We will now examine the saving and investment data in this background. Table 1 below gives the saving rates in Indian economy. It is obvious that the savings rate fluctuating between 8.4 and 11.8 per cent of ndp during the sixties. It has recently shown a rising trend and has reached at a level of 15.5 of ndp during 1975-76. The Reserve Bank of India in its Annual Report has estimated that the rate of saving has further risen to 15.7 per cent of ndp at market prices during 1976-77. This indeed means that saving rate has tended to show significant rise during the seventies.

Table 2 below gives the total amount and the relative shares of the households, private corporate sector and the public sector in the total national savings at current prices. It is obvious that household savings constitute the largest proportion of savings in the Indian economy. However, one is very much struck by very large fluctuations in household savings. Thus, it appears that household

savings fluctuated between 61.12 to 85.54 between 1960-61 to 1975-76. The only thing one can say is that there seems to be some kind of a relationship between the high level of household savings and the years of agricultural prosperity. The second most important contributor to saving is the public sector. In fact, the savings by public sector are an important determinant for public investment. Of late, the public sector in India has acquired the leading position in the sense that it is basically public investment which triggers off private investment in the economy. Naturally, in this context, the role of public sector savings is very crucial in the economy. A look at the table will show that during the early sixties, the public savings were very high constituting anywhere between 23 to 30 per cent of the total savings in the economy. However, during the later sixties, this percentage came down to a miserably low level. For example, in 1967-68, the percentage was only 12.08. It is notable that seventies have seen a regeneration of savings in the public sector. Whereas during 1970-71, these constituted 18.45 per cent of total savings, they rose to a very high figure of 23.40 per cent during 1974-75 but have marginally come down to 21.71 during 1975-76. The Reserve Bank of India Report has indicated that the share of public sector saving has further declined during 1976-77.

So far, government administration constitutes the most

important proportion of total savings in the public sector. The role of public enterprises has been rather negligible. For example, upto 1969-70, there were only few years where public enterprises contributed to any significant extent to the total savings in the economy. However, seventies have seen a very big change in this regard. For example, during 1974-75, public enterprises made a contribution of Rs. 392 crores out of a total government saving of Rs. 1597 crores (that is as much as 4.61 per cent of the total national savings and nearly one quarter of the total savings in the public sector). Although, their total contribution during 1975-76 has declined to Rs. 367 crores, still they constitute about one fifth of total savings by the public sector. Since very large investments have been made in the public sector, it is naturally expected that they should make an increasing contribution to savings in the economy. In fact, their role will be crucial in generating surpluses for the economy. It is true that defective price policy has been one of the important reason for their dismal performance. In addition, they have also been plagued by bad management, excess capacity, bureaucratisation etc. Thus, institutional and managerial and economic difficulties will have to be overcome in order that public enterprises start playing a major role in the economy. Coming now to the private corporate sector, one finds that their contribution to savings is very meagre.

In fact, over the years the contribution of private corporate sector to saving has been declining. In some years like 1967-68, it had reached the lowest level of 2.38 per cent from 10.53 per cent during 1961-62. It is only recently that the share of corporate sector has tended to show an increase. Thus, corporate sector recorded a figure of Rs. 843 crores of savings during 1974-75. But, once again, the savings have declined to Rs. 570 crores during 1975-76 constituting only 5.2 per cent of total savings in the economy.

The Reserve Bank Report indicates that although the aggregate share of savings has increased from 15.5 per cent of ndp in 1975-76 to 15.7 per cent in 1976-77, the shares of both corporate and public sector has declined. Only household savings have recorded a slight increase.

It is quite obvious that raising the saving rate of 22 to 25 per cent from the present level will need a herculean effort. Basically, it will mean that the public sector has to increase its share significantly through much increased taxation, reduction of subsidies and other efforts at resource mobilisation. The public sector has also to pull its weight more effectively.

DOMESTIC CAPITAL FORMATION

Column 5 of Table 1 gives the year-wise domestic capital

formation from 1960-61 to 1975-76 and column 7 gives the percentage share of net domestic capital formation to ndp at market prices. It is obvious from column 7 that recently there has been a tendency for the share of capital formation to rise. In fact, during 1975-76, it exceeded the earlier peak of 15.4 per cent reached in 1966-67. The economic survey was hoping that the trend would continue and the rate will remain the same during 1976-77. However, according to the latest indication given by the Reserve Bank of India, the rate of capital formation has declined from 16.1 per cent in 1975-76 to 14.3 per cent during 1976-77. It has already been noted that net domestic capital formation will have to be raised to a much higher level to achieve the targeted rate of growth for the economy.

Columns 6 and 7 of the Table brings out the difference between the share of domestic savings and domestic capital formation due to capital formation through foreign aid. It is obvious that during the early sixties, the gap between saving and investment was very high. In fact, nearly 25 per cent of capital formation was due to external aid. But recently during the seventies, the gap between saving and investment has tended to narrow down and foreign investment constitutes a very small proportion of total investment in the economy. In fact, during 1976-77, for the first time during the last 25 years, the savings rate has

exceeded the investment rate indicating that there has been actually a net outflow of resources. This has been pointed out by the Reserve Bank of India as a very serious matter. It indicates that the economy is not picking up in terms of investment contrary to what was expected by the Economic Survey. This more serious at a time when India has accumulated vast stocks of food-grains and also foreign exchange.

Table 3 below gives a break down of capital formation both by type of assets as well as by public and private sector. A detailed study of this Table shows that the share of public sector in the total capital formation has remained more or less constant in relation to private sector. If anything, recently it has tended to decline. In 1974-75, it declined to 40.6 per cent from 47 per cent in the earlier year. Another notable point is this that a significant increase in total public sector investment is due to increase in inventories. For example, the increase in stocks accounted for as much as Rs. 784 crores during 1973-74, Rs. 1454 crores during 1974-75 and as much as Rs. 2468 crores during 1975-76. It really means that the real investment rates are over stated because a high proportion of this increase is because of increases in stocks in food-grains etc. The real investment seems to have remained at the old level.

To sum up, it appears that the buoyancy in investment indicated by the increase in the rate of capital formation is rather misleading. In fact, the economy seems to be in a state where it is not moving fast enough because of lack of investment. It is partly because the public authorities are not able to raise enough resources for investment. In fact, demand for foreign aid and multi-nationals has become an excuse for not taking measures which are absolutely necessary. A case in point cited by the Reserve Bank of India is that in spite of the economy's unsatisfied demand for power, the demand for power equipment remains short of the capacity for producing it "because those who could use the equipments do not command the financial resources to pay for it". There is no doubt that very favourable circumstances exist wherein the level of investment can be significantly raised. What is required is adequate political will power to mobilise resources. Unfortunately, that will power is not coming forth.

(Restricted Circulation)

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Nature of the Price Problem
-- Some Comments

By

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NATURE OF THE PRICE PROBLEM & SOME COMMENTS

1. The continuance of price rise is one of the disturbing features of the last few months; and worse of it is a general expectation in public mind that the Janata Government would not be able to keep an effective check on the rising prices. If the Government has to keep up its credibility with the masses it must demonstrate its determination by undertaking specific set of measures to curb any further rise, and preferably, achieve reduction in prices of essential commodities. This is one single most important task before the present Government.

2. For evolving a meaningful set of policies, one needs to be clear on certain basic facts about the nature of the inflationary pressures of the present. Firstly, when assessing the degree of price rise during a certain period, it is not adequate to refer to (i) Index of wholesale prices, or (ii) the overall Consumer Price Index. It is a well accepted fact that the nature and methodology of constructing Index Numbers in India suffers from many defects; and these do not reflect true picture of the price rise as experienced by a common man. Secondly, the objective of no price policy, which has a social orientation, can be to hold or reduce

the prices for all commodities. A price policy, as an instrument of state policy, has to distinguish between price trends for essential commodities and the non-essential ones. A socially desirable price policy must aim to make basic and essential consumer items cheaper and the luxury items more and more expensive. For pursuance of such a policy there would, of necessity, have to be longterm and short term measures. Under the pleas for reducing prices, one cannot justify concessions in tax or hold out subsidies to production units which cater to the needs of the upper income groups of the population. Similarly, one cannot plead for continuance of low pricing by public sector for all goods and services because it has been traditionally so. The pricing formulae in India, even in the public sector, has been unjust in a large many cases. To the extent it is so, this has to be corrected.

3. Thirdly, it is essential to recognise that in India, it is not always correct to make an assumption that by operating at the wholesale prices alone one can de facto achieve a reduction in the retail prices. 'Retail' and 'wholesale' prices do not move together. In fact, there is evidence to suggest that due to the rigidities and imperfections of the marketing system and trade practices,

the advantage of reduction in whole-sale prices does not get passed over to the consumer by the retail traders; on the other hand, the rate of rise in retail prices is higher than what generally operates at the wholesale level.

4. Fourthly, out of the total number of essential consumer items there are a few of them which do not occupy an important position (in terms of their individual weight in the total consumer basket) but are the trend setters about the price consciousness in public mind. For instance, if price of vegetables rises by 50 per cent over one month its impact on the public mind would be far lesser than 20 per cent rise in price of pulses or vegetable oils. It is necessary to understand the reasons and rationale of the public mind with reference to price rise of different consumer commodities.

5. Fifthly, in a discussion on prices one has to recognize that there are groups of commodities each having its own set of reasons for price changes. For instance, the group of commodities originating in agriculture would have the characteristics of Seasonality and the prices would be considerably influenced by the level of agricultural production in a year. However, there are commodities of industrial origin, particularly if the industry

is dominated by a small number of producers, where prices are amenable to manipulation and monopolistic practices. And yet there can be a group of commodities which are close substitutes for traditional items of consumption. In the case of such a group commodities the prices may remain fixed for non-economic reasons. In brief, while dealing with the question of price rise one has (apart from macro considerations of money-supply and credit policies) to analyse price situation in a dis-aggregated manner each case individually. It is this approach alone that can help achieve the desired objectives i.e. a pin pointed approach to prices of a set of commodities in contrast to seeking solutions in reducing the general level of money supply or cutting down on public investment.

6. Sixthly, in the Indian context it is relevant to recognise that in a large consumer goods manufacturing and processing sector prices are fixed by industrialists with active co-operation and under the patronage of the government. This holds true for textiles, sugar, vanaspati, cement, pharmaceuticals, soaps and detergents, bi-cycles and a host of other commodities. The prices for these commodities are supposed to have been fixed to avoid excessive profiteering by producers. The facts, however, are to the contrary. A small group of bureaucrats

after discussions with representatives of the industrialists, in practice, fix prices. The primary assumption in allowing this practice is that organised industrial sector units maintain reliable cost data. This assumption is far from truth. The cost data is a highly manipulated one and has built-in high profit. This phenomenon of the industrial sector has been well recognised and government has always avoided taking remedial action under pressure from the vested interests - who constitute a vocal, influential and aggressive group of people. In this connection, it is also worth noting that while there has been a Essential Commodities Act for long, the Government in India have invariably, for undefendable reasons, preferred to fix 'informal' prices instead of price fixation under the Act. This loophole has always enabled the manufacturers to escalate prices at their convenience.

7. Seventhly, it is not often recognised that the pattern of production in an economy is a direct reflection of the nature of investments and the production capacities built over years. Left to themselves, in a free market oriented economy (which India essentially is) the new capacities are built to satisfy the market demand - which in turn is determined by the level and pattern of incomes and wealth distribution. The Government of India,

through its policies adopted over three decades, has kept the public sector's role largely confined to building up of infrastructure and heavy and basic industries which provide cheap industrial inputs and services. The Government had left the consumer goods sector for the private manufacturers and industrialists with least regulation of prices, quality, production or distribution. Much worse than this has been the harsh reality that while the basic strategy of development assigned the consumer goods sector to the small scale and cottage industries, in practice, "large industrial sector and the Multinational corporations were increasingly allowed entry in the consumer goods sector of the developing economy of India. One has just to name a consumer item and it would not take long to discover the existence of a large industrial unit, a multinational corporation or an Indian company with foreign collaboration in the field of production. May these items be toiletries or washing soap, vanaspati, shoes, textiles, writing ink, pharmaceuticals, cigarettes, crockery, sugar, processed food, baby food, coffee, tea, beverages, or house hold durable items of conventional and non-conventional nature. The above pattern of development has a variety of built-in implications - these, of course, also travel beyond the realm of prices.

8. And lastly, an unfortunate feature of the Indian economic system is that an average consumer does not have access to price information. He has to either pay or go without the goods, if he raises any doubt about the high prices at retail outlets. Even such commodities for which prices are fixed, are sold by retailers at a premium. There is near absence of price vigilance by the government. Very few would know of the agency to whom one could go for redress. The price tags, one good aspect of the Emergency, are increasingly disappearing. In a situation when traders expect supplies of a commodity to get reduced, they indulge in the practice of hoarding to be able to sell goods in black market. Such anti-social activities do not attract quick remedial action by any governmental wing. Invariably, and strangely enough it has become a practice to place higher reliance on appeals of cooperation from traders, during such times, then taking punitive action with all the necessary social and moral sanctions.

9. One can approach the problem of price rise at a macro level and relate the rise to increased money supply with public. The nature of conclusions following from this angle is obvious. On the other hand one can stress on the need for augmentation of supplies through

enhanced production. Again, the constraints to production can be identified both in general and specific terms.

There is the third set of suggestions which underlines the need to build up a broad based public distribution system. While one can not take a position that the above approaches do not have any relevance to the present inflationary situation, one would like to underline the institutionalized factors which are indeed the root causes of the recent inflation in the country.

10. The imperfections of the market, with assured patronage of the administrative system, are indeed of real significance in escalation of prices in an organized manner. The co-operative stores (called as super bazars) promoted as instruments of reducing high intermediary profits have become display windows and sales counters for products of the large production units belonging to multinational corporations or monopoly houses. Though, these are supposed to be large chain stores which can use their bulk buying power to bargain for lower prices with producers, the fact is that large manufacturing units are able to dictate their own terms to these cooperatives. The institution of consumer cooperatives has turned into producers' cooperatives.

11. One feels that price problem of to-day has also to be viewed from management angle. There have to be commodity perspectives which are realistic. If the consumers are taken into confidence about un-avoidable shortages one would not find so much of dis-satisfaction amongst them. Nothing could be worse than a situation when persons in authority give out assurances which have no real substance and are contrary to day to day experiences of the common man. The credibility of the governmental institutions, by such cases, is bound to get eroded.

12. At the end one may also emphasize that the Government would have to soon decide if it would still continue to keep the public sector confined to heavy and basic industries. If it does not favour public sector entry into processing and manufacturing of essential consumer goods, it cannot hope to meaningfully change the present pattern of production which is essentially built to cater to the needs of the elite sections of our society.

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Seminar
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Economic Justice In An
Economic Democracy

By

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ECONOMIC JUSTICE IN AN ECONOMIC DEMOCRACY

The edifice of national economic policy should be constructed on the basis of economic democracy which should be geared to the adoption of a strategy which also ensures economic justice.

Economic Democracy

The essence of an economic democracy is that the votes cast on the market (by individuals directly through expenditure themselves or indirectly through providing amenities to them by purchases of materials by their employers) should be equalised. This calls for measures to reduce drastically the power to spend out of one's wealth and income. It does not necessarily require a curb on one's income and wealth. The basic question is whether we shall immediately get an egalitarian society or through the intermediate region of an equalitarian one. The former is one in which the incomes and wealth, and consequently consumption, are all equalised; while the latter is one in which the exercise of purchasing power of unequal incomes and unequal wealth is sterilised so that consumption is sought to be equalised (or disparities materially reduced as a first step towards equalisation). Unless consumption is directly attacked, it is felt that the indirect process of curbing it through reduction in net income or net wealth are ineffective (short of a socialist revolution) for there is always enough left with the higher Income-and-Wealth groups to create a consumption disparity of one to hundred (or more) between the median

consumption, being of the common man, and that of the clan of affluent persons.

Equalitarian State

To establish an equalitarian state, it is necessary that the matter be tackled both from the side of consumption and production control. The ordinary run of indirect taxes, whether on necessities or on luxuries, fail to limit the consumption of the luxury goods for the top income echelons. They do so from the bottom only and hence they are prohibitive for the lowermost strata which actually uses or the top-most among the strata which aspire to use the goods. For those above that strata, the in-folk as it were, there is no great dissuasion. The Income-Tax also does not hit so much the luxury consumption as the Investments of the affluent. For the most affluent section of assesseees - the firms and corporations - it acts as an incentive rather than a disincentive; for the higher the expenditure on decolam panelling of the office and residences of the executives, the less the tax base of the firm.

The Kaldorian expenditure tax is indeed, in theory, an important disincentive for consumption, but it was never introduced in India. The Krishnamachari version of it was ill-designed, ill-executed, ill-evaluated, ill-condemned and then, instead of strengthening it to remove defects, it was withdrawn. But the Kaldorian Expenditure Tax works from the demand side as a disincentive to consumption. The experience has been that unless the disincentive comes from the supply side first, demand

disincentives are meaningless. Thus one cannot plan for expanding the production of refrigeration and then tax their consumption for the ostensible purpose of dissuading people from buying them. A fall in expected demand induced in such a way is easily and bound to be rectified by giving loans and other facilities to Government servants and other privileged groups to buy refrigerators on easy terms to prevent stocks accumulating and either excess capacity or retrenchment or both in that industry. An introduction of Demand Policy without changing correspondingly the Production Policy is like bridging a river without controlling its flood; the latter soon, in unabated fury, overpowers the former.

Disparity Tax

The Disparity Tax tries to hit at unnecessary consumption from the supply side as well as demand side. It gives substantially better treatment to assesseees who invest in priority lines in relation to those in inessential fields, thus redressing the existing imbalance in favour of the higher lucrativeness of investments in luxuries. It also discriminates between socially approved and unapproved sources of income and treats them differently, again making a substantial difference in the amount of tax payable. It discriminate among the large, medium, and small scale as also the minature scale as regards investments; and it bridges the gap between the high social cost of the large scale and its low apparent cost on account of the innumerable subsidies and concessions which the large-scale

enterprise is given (ranging from the low cost of borrowing, and release of foreign exchange at controlled rates, to provision of infra-structure at the public's expense).

The Disparity-Tax system achieves the social objectives underlined above through scaling upwards the Income from unapproved sources, to get notional Income then deducting from it the notional Investments by first scaling downwards the unapproved ones, and then the Notional consumption thus obtained is subjected to a rate of taxation wherein the marginal rate rises progressively (rather than regressively, as in Income Tax). By virtue of this, at higher consumption levels (whether of individuals or of corporations or of units of decision-making in Government) for a thousand rupees consumed or misinvested, the tax liability may become higher by several thousand rupees; and conversely for a thousand rupees not consumed but well invested, the tax liability is reduced by a few thousand rupees (which also have to be well-invested to escape the rigours of the Disparity Tax).

The Disparity Tax allows incomes to be earned to any extent and permits unhindered accumulation short of the extent beyond which one enters the concentration circle (defined as that from which large-scale production starts). But the tax prevents the misuse of income and wealth though earning and possession of wealth are both considered to be essential elements of growth in a composite economy consisting of the Public, the Private and the Joint Sector. The system being run to achieve economic democracy

is committed to ensuring a production pattern which yields a consumption standard and spectrum which avoids the sting which is usually associated with use of wealth for conspicuous consumption.

The tax will be payable with certain discounts when paid in form of certain shares of holding Company not ordinarily marketed, or of essential commodities on a delivery receipt. Each component of the tax helps the others in achieving the objective and does not oppose the economic policy of growth and equalitarianism as the Income Tax does by acting as disincentive to earn and to produce, while providing an inducement for corporations to spend lavishly to over-capitalise, and to increase the salaries and perquisites of the executives as also wages of the rest of the employees.

The Disparity Tax properly designed, makes the allocations balanced in such a way that production of essentials is sufficient to deal with the self-demand of the productive sector as also excess demands created by investments in long-gestation projects; while wasteful expenditure is forced to be avoided both by the public sector and private sector. It acts as an anti-inflationary device, in the background of which there is expectation of plenty of essential-commodity production, and hence an inbuilt disincentive ~~is~~ for hoarding is obtained. It helps, therefore, the other measures for control of inflation and if a Government wishes to work seriously for curbing price rises, it is essential for the other measures to succeed continuously for any length of time.

Percolation & Permeation Patterns of Investments

The pattern of Investments which would be proposed to be achieved would reflect the long-term strategy to be adopted for Full development to be achieved at the earliest. Full development is the attainment of the Golden-age growth at full-employment for the then-existing population. It aims at providing enough Heavy-Investment to provide highly mechanised machinery for production of consumption goods at the standard of living of workers in the average advanced countries, to all the working population at full employment.

The various long-term strategies aimed at achieving the objective in least time, all subject to non-inflationary growth, get classified into two groups - those in which consumption goods as well as capital goods percolate from above, and those in which they permeate from below. In the Percolation group of strategies the provision of goods is made for those inside the Glass-curtain Economy (where a mass of people from outside watch a few privileged ones enjoying the material benefits access to which is rigorously denied to those whose hands are stopped at the Glass-curtain for lack of purchasing power). This is done in the hope that these goods will percolate downward to more and more people. Thus the supply of television sets as consumption goods or the provision of tractors to a few farmers as capital goods is done in the expectation that, in time, all persons desiring these will get them, are both frustrated by the fact that fresh investments tend to provide better goods to the same affluent sections - whether it be change from black-and-white to technicolour in

television, or from tractors to combined-harvesters in agriculture.

The Permeation Group of strategies, on the other hand, insist upon austerity in consumption for all (not only the masses), and provision of simple equipment for the manufacture of essentials. In one form of permeation strategy called Wage-goods strategy, Heavy investments are postponed; in the other form called Heavy-Investment strategy, this sector is given the highest priority. In both these, the supply of essential consumption goods is plentiful in relation to the demand, and the techniques used are labour-intensive. Both these distribute the consumption goods and industries in the countryside and in the small towns. Both use technique of production which do not, to any large extent, depend upon the products of Heavy Investments or foreign exchange. In both, the profit to wage ratio is low, output capital ratio high and employment per unit of output also high. In both employment can grow fast. Both of them yield social justice and simultaneously with it, its own type of growth.

Economic Justice

But the distinguishing feature between social justice and Justice (Economic and Social) is defined to be that the latter gives inter-generational equity also. In the Heavy-Investment strategy there being little diversion of capital goods emanating from the Heavy-Sector towards the consumption goods, there is a large rate of ploughback of Heavy-Investment goods in the regeneration of that sector, and because of its rapid growth it offers huge employment there (both in highly-mechanised forms of

production-like the steel mills - and less mechanised forms - like multipurpose dams constructed with labour-using methods). But the products of the Heavy-Investment sector being used for its own expansion mostly, there is a build-up of long-term industrial capacity of such an order that what would have taken ten generations to accomplish is telescoped into three. The economic justice to the future generation, giving them a highly-sophisticated heavy-machinery sector on which to secure with its capital-intensive equipment whatever standard of living they want, takes into account the responsibility of the present generation to use the nations given present-endowments for their own benefit as well as that of the future. The Heavy-investment strategy as a form of Permeation Group of strategies gives growth with economic and social justice, based upon equalitarian consumption, whereas the Wage-goods strategy though providing social justice tells the next generation to look after itself, thinking in terms of the bull of the famous nineteenth century Irish Parliamentarian, Sir Boyle Roche, "Why should we do anything for posterity, when posterity has done nothing for us?"

Whenever one hears references to too much investment in the Heavy-Sector, one is reminded of this attitude, on the basis of which Full Development will never be achieved.

Heavy-Investment Strategy

Often the thinking on economic strategies is confused by the fact that everything which is capital-intensive is called Heavy Industry(a terminology for which the Planning Commission

has in the last twenty-five years owes no little responsibility). It is to be clearly understood that the Heavy-Investment strategy gives priority to the Heavy-Sector which is solely comprised of the set of industries which are essential for the growth of the infra-structure, provided consumption goods are provided from outside (from a sector of low degree of mechanisation using hardly any Heavy-Investment products). Thus chemical fertiliser factories though highly capital-intensive are not part of the Heavy-Sector in the Permeation Strategy Approach. They take their place, along with tractors, etc, as comprising the Mechanised Light-machinery sector. On the other hand, building a railway track embankment with the help of labour, basket and poles is a part of the Heavy Sector.

By virtue of this, what is one to make of the Policy statement that in India we do not want Heavy investments to grow fast? What exactly is being disapproved here? Is it against the railway locomotives and electric generating-stations which are the backbone of industrial expansion, or against fancy heavy investments in satellite launching or for combined-harvester production or acrylic fabrics or seventy seven cola? One is not at all sure as to what is being attacked, but one suspects that this attitude will hit the capital-goods industries essential for their own regeneration, while the capital-intensive industries of Mechanised Light-Machinery strategy or Rubberfoam-Mattress strategy will swim through for not only their survival but

in thriving form for future growth. To resile from the policy of Priority for Heavy Investments is the greatest harm for Economic justice which can be done to this country by any government, whether one which does not (out of inadequate comprehension of issues involved) believe in it, or one which did believe in it but could not (out of inadequate comprehension of the type of strategy required for its proper implementation and realisation) actually achieve the objective. The percolation strategy of Mechanised Light-Machinery which is the basis of the Mahalanobis Model is antithetical to the priority to the Heavy-Investment Sector because of the draught on the products of the Heavy Sector which it entails for the consumption-good sector. The percolation Strategy of Rubberfoam-Mattress which grew out of it in practice (by keeping the modernised capitalist sector in operation while pushing it out of the Heavy-Sector into the consumption sector under an Industrial Policy Resolution), is a parasite feeding upon the Heavy-Investment sectors growth prospects as well as appropriating materials which would have in the alternative gone for production of consumption necessities. The votaries of the Wage-goods strategy who want Heavy-Investment to grow only for providing the inputs for the agricultural sector are in grave danger of unwittingly succeeding in making the economy stray out of the Permeation Group to adopt the Mechanised Light-Machinery Strategy of the Percolation Group.

The above are some simple elements of economic development with social justice which undergraduates are taught at Osmania and certain other Universities, as preventing the achievement of Economic and Social justice, rather than being indoctrinated, as in countless other citadels of learning, into believing in the traditional principle of producing what the market demands (which is true only after Economic Democracy has been achieved by either equalising incomes, or imposition of an equalitarian tax like the Disparity Tax with unequal incomes continuing in the meanwhile). It is time that some clear thinking on these and related issues took place in policy-making circles, so that one would break the shackles of orthodox economics enveloping our thinking.

Non-Inflationary Deficit Financing

With the pattern of Investment, set by the non-inflationary strategies of the permeation Group stressing Heavy Investments, and the instrument of Disparity Tax as a powerful weapon to achieve this pattern in Public and Private sectors both, the form of finance of new investment can be by expansion of currency to the desired and necessary extent! There can be no fear of inflation, as the pattern of investment is set to avoid inflation, as also because indirect taxes will either be minimal or non-existent. (This will prevent a situation which while depending upon revenue - oriented taxation causes prices to rise both when the indirect taxes are put on necessities and by a process of percolation of burdens, on luxuries).

The rate of interest will be low in genral; and lower as per a discriminatory schedule, in the proper forms of investment, while it will be high in unapproved forms. The rate of profit in necessities will go up \times and in luxuries it will be brought down to a lower level than in necessities. The costs to the agriculturists \times for all inputs being lowered, the price of produce will be kept low and will still give an incentive rate of profit. The needs of a low price of essentials which the industrial worker wants will be fulfilled without hurting backbone of the agricultural sector, the small-farmer- thereby allowing the achievement of the Accord between Industrial and Agricultural working-class interests which is necessary in this conflict-of-interest situation of the two main groups of the working population.

With a low interest-rate policy and the incentives to Investment in necessities the necessity will disappear of two opposite types of advertisements which are being done - "Consume more" by the private and public-sector producers of luxuries, and "Save More" by the National Savings Organisations; the former always getting a better response in the current situation. A nation does not require savings from the subsistence level wages of workers, but their best efforts. Savings entails only a money wage higher than necessary, and hence without savings a price level will rule which will be below that which is expected to rule when a high wage or bonus throught of as a wage is paid, and then asked to be saved. A high-wage policy to beat down the cost

of living beats its own objective. A high-wage policy for certain industries where productivity is high creates various classes of privilege and disparities of standard of living among the workers themselves. Both types of high-wage policies are inflationary and actively work against social justice. Payments to workers out of increased prosperity of firms should be in the form of bonus shares, and of larger workers' participation.

Is the above profile desirable as a national consensus for Growth, and simultaneously achieving justice (Economic and Social)? If so, how is it to be made acceptable? These are issues which are worthy of being currently debated as options are again being laid open.

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Seminar
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Public Distribution of Essential
Commodities : Some Issues

By

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PUBLIC DISTRIBUTION OF ESSENTIAL COMMODITIES :
SOME ISSUES

1. This note attempts to present some of the principal issues in public distribution policy for essential commodities especially food-grains. The need for an adequate public distribution system (PDS) is broadly recognized by most economists and policy-makers in the country. However, the objectives of such a public distribution system have not been clearly identified. Three main objectives of public distribution policy could be considered: (i) maintaining a parallel or countervailing force when the market is not functioning properly due to various types of bottlenecks; (ii) containing the prices of essential commodities which may have the cost-push effect and (iii) immunising the vulnerable sections of the population against price rises. We, here, consider the third objective as the primary focus of public policy.

2. Public distribution policy, so far, in the country has been diverse and uneven as between different regions. Whereas the State of Kerala has almost 90% of its population covered by some system of public distribution of food-grains, Karnataka has public distribution only in seven out of the eleven cities in the State. In Gujarat public distribution of food-grains covers a substantial proportion of rural as well as the urban

population. There are nearly 9400 fair price shops and they are also experimenting with mobile fair price shops in one of the tribal regions. In a number of other States, it is largely some of the urban areas which are covered by the public distribution of food-grains and levy. Rural areas have generally been left out of the public distribution system due to administrative difficulties, non-viability, etc. Urban centres especially big cities have been covered by public distribution on the plea that these high purchasing power pockets, unless cordoned, would suck away the essential commodities from the rural areas and thus raise prices for them. However, it is recognized that an important reason for covering large urban centres is the fear of organized sections of industrial workers and middle-class exerting political pressure on the system.

3. Most political parties in the country have accepted the need for strengthening the public distribution system and insulating the poor and the deprived sections against possible high prices in a period of scarcity. The rural and the urban poor are particularly vulnerable to these price rises since they cannot afford to buy even their minimum needs of essential consumption goods at these high prices. This is sharply brought out by the fact that we have a foodgrains stock of over 20 million tonnes available

with us, the number of people who are under fed and undernourished exceeds at least 100 million. While, the real solution of this problem lies in raising the income, employment and productivity of the rural poor, in the short period they would need to be protected and possibly subsidised in respect of their basic minimum needs through an efficient and adequate public distribution system.

4. Obviously, public distribution system for its efficient running requires a system of timely and adequate supplies. In some case these supplies will have to be procured internally and in others, supplemented through imports. The quantity needed annually for running the public distribution system depends upon the coverage of the system, whether full or partial needs of the vulnerable sections are met and whether the system is operating through out the year or in some seasons. The estimates for food-grains for the public distribution system range from 12 million to 25 million tonnes.

5. Questions have often been raised regarding the operational aspects of the public distribution system. It has been observed that the off-take from the public distribution system varies from year to year. It has also been noted that in case of food-grains one of the reasons

for reduced offtake is the type of cereals available with the fair price shops. In a number of rural areas, there is preference for coarse grains over wheat and rice which are generally procured and distributed through the system. It may be necessary to build up stocks of coarse cereals also. However, one will have to take into account the possible more rapid deterioration of some of these cereals during storage.

6. Questions have also been raised regarding the viability of rural fair price shops. It is obvious that the commodities in which a rural fair price shop deals would have to be diversified, the population it covers would have to be enlarged, if it has to become viable. Except in areas where population is extremely sparsely located, it may be possible to make the rural fair price shops viable by diversifying their product lines. It would also be worthwhile in this connection to experiment with mobile fair price shops and fair/^{price}shops functioning at the hats and bazaars for the tribal and rural areas where such institutions exist.

7. Questions of support price, procurement price and issue price need to be considered for the essential commodities covered under the public distribution system.

Further, the channels of procurement also need to be clearly identified. In case of foodgrains, procurement practices have differed from region to region. While in Punjab and Haryana procurement was done through the regulated markets by a system of pre-emption by the procurement authorities/agencies. Some of the States have used levy on producers or on millers (in case of rice). The procurement system can be made more progressive, if it is a graded levy on the producer. Procurement through the market is generally likely to be regressive in character because the smaller producers are likely to come to the market immediately after the harvest when the prices are generally low. There are, however, administrative problems which may arise where the number of farmers or producers who have to pay the levy in a region is extremely small. Such a situation may arise in deficit districts or regions where the producers with adequate supplies may be extremely small in number. However, there seems to be no valid reason in excluding surplus producers in deficit regions from the purview of procurement.

8. It has often been contended that in period of scarcity, procurement can be done only with a certain degree of coercion or 'taxation'. However, the fact that as a result of procurement, the open market prices rise and

thereby give a certain advantage to the producer is often omitted. If we consider the weighted average of the procurement price and the open market higher price, the producer may not necessarily be a loser. Further, if we want the government to accept the responsibility of supporting prices when these are declining buying at a price higher than the market would determine we cannot justifiably raise any objection to its buying at a price lower than what might have been but for procurement. The suggestion that procurement price needs to be raised on the basis that these are confiscatory is therefore specious. Further, it cannot be shown that a higher procurement price would lead to greater procurement of supplies.

9. The question of issue price of the foodgrains has received considerable attention from scholars and policy-makers. Evidently, the issue price has an effect on the open market price; which has linkages both to the open market price and the procurement price. It may also influence the general price level and the economy through its impact on the size of the subsidy. If we look at the question of issue price from the main objective of the public distribution system, namely, catering to the needs of the vulnerable segments of population, the question takes a completely different form. In this case, the issue price would have to

be lower so that these segments could afford to consume the minimum quantities needed for their health and well being. Whether one can have two types of issue prices, one for the vulnerable sections and the other for the not-so-vulnerable is a question that needs to be further studied because of its administrative implications, affect on the open market prices etc.

10. The foregoing paras have looked at the public distribution system particularly from the point of view of foodgrains. Problems connected with building up of an efficient public distribution system for other essential commodities such as pulses, edible oils, cloth and sugar need to be studied in greater depth. While some of the problems may be common there are technical and relative price problems with regard to the pulses and the problem of instability in production with respect to oil seeds and cotton. These have to be tackled on a longer term basis, however, some immediate action in terms of building up stocks and public distribution are necessary so that the prices of some of the essential commodities can be brought down and minimum supplies made available to the poor.

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Rural Unemployment and Poor

By

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RURAL UNEMPLOYMENT AND POOR

It is in the light of the well known scenario of poverty and unemployment that we have to tackle the problem, the first point which strikes one is that poverty is much more widespread than unemployment. This means that a person may be employed and yet remain poor. This may be due to several reasons. If he is fully employed and yet poor, it would mean that either the type of work he is doing is not productive or remunerative enough or, as in the case of bonded labour, he is exploited by his employer. In another case, such as that of a small farmer, his farm may be so small that it does not provide him enough work and income. Similarly a small tenant though he works hard, he may not earn enough because he has to pay exorbitant rent to his landlord. The rural artisan is poor because there is not enough demand for his products, either because of lack of purchasing capacity of his clients or because the goods he produces are not able to compete with the same goods produced by factories. The point is that each situation demands a different type of remedial action.

Numerous measures have been adopted during the past 25 years for reduction of poverty and unemployment. There have been crash programmes of employment, employment guarantee schemes, special programmes for small farmers,

agricultural labourers, tribals and for drought prone areas. Though well intentioned, their impact on poverty and unemployment has been negligible. Sometimes, as in the case of the 20 (and 24) point programme, they did more harm than good. The freed bonded labour had to starve and the moneylender became harsher when his erstwhile clients debt was liquidated, but no alternative agency was ready at hand to lend him money. The Janata Government which has replaced the previous regime believes that the very development strategy with its emphasis on big industries and neglect of agriculture, small-scale and village industries was misconceived. This is too simplistic an explanation and I am unable to accept it. Instead, I would accept that the poor were neglected and the rich, particularly in agriculture were favoured. Apart from the requirements of defence, big industries are needed for modernization of agriculture and also of the small-scale industrial sector. Agricultural sector needs chemical fertilizers, pesticides, irrigation pumps, power-tillers and in some regions, tractors. Small-scale industrial sector needs lathes and machine tools. Besides, we need cement and steel for bridges and dams, and power generators, transmission towers and cables. The dichotomy of industry and agriculture is thus false and untenable. Even so I welcome the Janata Party's intention to pay more attention to agriculture, small-scale and

village industries and labour intensive technology. The rub will be in translating these intentions into concrete programmes. This will need considerable homework. Take the case of Khadi. Why is Khadi not able to compete with mill-made cloth? When we try to upgrade its spinning technology - through Ambar charkha, 6 spindle and 12 spindle and now with partially mechanised mini-spinning units - we find that its employment potential comes down drastically. The irony is that, by and large, mass produced goods - goods produced by the poor masses of comparative quality are more expensive than mass-production goods - goods produced on large-scale. To put in other words, large-scale production is cheaper than small-scale production. The scales can be turned by taxing the former and subsidising the latter. But if as a result, the price of essential commodities like cloth goes up, you take away from the poor by hand what you give to him with the other. Thinking aloud, I would say, encourage the artisans to produce fancy, luxury, high cost goods - carpets, shawls, toys, hand stitched leather goods, etc. and let the mass consumption goods be produced relatively cheaply through large-scale production. Dr. Raja Ghelliah in a recent article (Times of India, July 6) has put the same idea more explicitly. To quote: "As regards mass consumption goods other than foodgrains, it is the mechanised sector that can create a

surplus of wage goods over and above what is consumed by workers in that sector, which can then be used to provide employment to others The proper strategy would be to employ surplus-creating techniques in mass consumption goods industries and adopt labour intensive and relatively non-mechanised techniques for capital formation in agriculture, rural transportation and housing etc."

In the field of agriculture, the malady is more deep rooted. It emanates from lack of productive assets, mainly land, and exploitation of the weaker sectors, be they marginal farmers or share-croppers or landless labourers of tribals or harijans, by the big and often absentee landlord, the money-lender and the trader. Its elimination would involve a complete dismantling of the existing rural power structure, and not simply an increased allocation to agriculture by a few percentage points.

To sum up:

(1) More food should be produced at lower cost through improved technology so that even if the money incomes of the poor remain the same, their real income will be higher. If the food prices can be kept low - as a result of lower cost - the poor will be able to buy more food without additional expense.

(2) Measures should be adopted which would prolong the duration of employment of the self-employed - be they small farmers or rural artisans. Irrigation can keep small farmers to double crop their land and improved technology can improve the quality and reduce the cost of goods produced by the artisans and make them more competitive with mill-made production.

Provision of subsidiary occupations like milk - production and poultry would improve the employment and income of the landless labourers.

(3) Security of tenure, institutional credit and marketing should be provided to protect the weaker sections from the exploitation of the landlords, money-lenders, traders and the middlemen.

(4) The hard core of the chronically unemployed should be provided guaranteed employment on building up rural infrastructure - roads, community wells, housing, land development, soil conservation, afforestation. There is nothing very original in what is stated above. But then Janata Government will be judged not by the originality of its development strategy, by whatever name it is called Gandhian or Socialist, but by its success in implementing some of these rather simple-looking programmes in the 5 lakhs and odd villages of India.

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Seminar
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Approach to Agrarian Structure
The Policy Options

By

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Introduction:

Charan Singh has put forth an alternative approach to major economic issues before the nation.⁽¹⁾ He argues for remodelling of the economic policies on what is generally claimed as the Gandhian lines. His basic formulations need serious examination. This is particularly so, since Charan Singh is, (i) the founder leader of the erstwhile Bhartya Lok Dal (an important constituent of Janata Party) and occupies a high position in the ruling political party at the Centre and in many States as also hold important portfolio in the Government of India; (ii) a vocal and aggressive personality to fight for a cause that he believes to be just and reasonable; (iii) his formulations and policy proposals appear to be backed by statistical evidence to introduce an element of objectivity; (iv) the attack on heavy industry bias in planning, in his thesis, is derived from his case to prove the neglect of agriculture during the post-independence era. His plea for higher priority to agriculture and the need to introduce an element of preference to the rural sector would, because of the large rural population, find sympathetic popular response

(1). Charan Singh, Minister for Home Affairs, Government of India has recently circulated a paper elaborating main points of his thesis. The name is available as: "Notes on Indian Economy" (Mimeographed) for the Seminar on Economic Policy Options, 24-25 September, 1977, Delhi. One may also refer to his two books published earlier Whither Cooperative Farming? (1957) and Joint Farming X-Rayed (1959).

from nearly four-fifths of the Indian population. The proposed emphasis on agriculture is likely to be welcome in all parts of the country and the appeal would not be confined to some States only; and (v) as the Janata Party is still to acquire its economic personality, one has reason to expect, his formulations and economic policy frame has a direct relevance in evolving the future public policies for the next few years. It is because of these reasons that one needs to critically examine the Charan Singh thesis. This paper is one such effort.

2. What should be the future pattern of Indian agrarian structure? The future agrarian structure should, according to him, ensure:

- a) Maximum production of wealth or eradication of poverty;⁽²⁾
- b) Provision of full employment;
- c) Equitable distribution of wealth and avoidance of undue disparities in incomes; and
- d) Strengthening of democratic trends.

It is argued that the government must ensure

(i) abolition of all types of intermediaries and all

(2). The objective as stated presumes that enhancement of agricultural wealth would not only be equally shared but the gains of development would somehow flow in favour of the poorest, resulting in eradication of poverty. This approach is well comparable with that of FICCI and the notion that growth in GNP would always mean eradication of poverty.

cultivators should be brought under direct relationship with the State;⁽³⁾ (ii) fixation of cash rent as multiple of land revenues; (iii) early completion of consolidation of holdings; and (iv) abolition of all right of resumption by landlords.

The above stated four land reforms laudable and the Congress and the Government of India have always pleaded for their early and effective implementation. This, therefore, is not the distinctive feature of his thesis.

3. Charan Singh argues that as land in India is an inelastic factor of production, the agrarian structure should aim at achieving highest output per acre. Having said this he decides to have one general rule. According to him, none should be "allowed to hold an area of land which, under its particular technique of farming, is beyond the capacity of an average man or worker to manage, and none possesses less than an area below which how-so-much labour may be applied to it, land will not produce more per acre." In brief, his stand is "upper limit of the farm shall be governed by the working capacity of one or one unit of

(3). Only members of the armed forces and physically handicapped to be allowed to lease out land.

Approach to
Land Ceiling
and Floor

manpower and the lower limit by productive capacity of one unit of land"⁽⁴⁾ (emphasis added).

The Empirical Base:

4. For determining the 'ceiling' and 'floor' of the land holdings in India, he has given two statistical tables. First table is reproduced from a book by John Lossing Buck entitled Land Utilization in China, (Chicago Press) 1937.⁽⁵⁾ The second table: "Comparative Levels of Agricultural Output and Productivity in 1965" is taken from Maddison, A., Economic Progress in Japan and USSR, George Allen and Unwin, London, 1969.⁽⁶⁾ Charan Singh has come to the conclusion that "Statistics taken from the two tables" indicate "if the area a man possesses amounts to more than 27.5 acres, land is not fully utilized because of lack of sufficient labour and, if it amounts to less than 2.5 acres per worker, labour is not fully employed because of lack of sufficient land".⁽⁷⁾

5. According to Charan Singh a ceiling on present possessions of land should be imposed at a level not more

(4). Charan Singh, "Notes on Indian Economy", pp.17-18. This formulation has serious implications. One needs a separate discussion on it. However, it may suffice to say that one implication of this is that larger farmers should be provided all that they need and smaller ones an area where they can have highest productivity of the land. One standard based on best manpower use (for the larger ones) and another for the poorer ones i.e. land productivity.

(5) Ibid, p.10

(6) Ibid, p.15

(7) Ibid, p.18

than 27.5 acres per adult worker.⁽⁸⁾ In India, as per his thesis, usually a cultivating family consists of two workers. One interpretation of this would be that, generally speaking, if family holding is the basis, land ceiling should be at 55.0 acres. The 'floor' on similar basis would be at 5.0 acres.

6. How much credence can one place on conclusions derived from studies of the U.S. and UK origin, which deal with agriculture of China, France, Germany, Italy, Japan, U.K. and U.S.A. (with no reference to India at all) is an open question. To determine a level for 'ceilings' and 'floor' one has a large amount of Indian data. Farm Management studies of 1954-57 and 1968-70 conducted in different parts of the country should be considered directly relevant and meaningful.⁽⁹⁾

Input/Output Approach:

7. There is abundance of data to show that in India as a whole productivity per acre declines as size of cultivation unit increases. Input-output relationships in agriculture also establish that the main reason for decline

(8) An adult worker, includes his wife and minor children, if any. Ibid, p.19

(9) There has been a lot of debate on the 'optimum' size of land holding in the 'Fifties'. Moreover, scores of Indian scholars have attempted to examine relationships between size and productivity, employment, agricultural capital and modern inputs. But the essential point is not only an economic one. It has to be seen with reference to the socio-political conditions prevailing in the society.

in output per acre is in the sharper corresponding decline of labour input per acre. It is also empirically well established that larger farmers depend on wage labour to a considerable extent; the smaller farms exclusively depend on family labour. With the given rigid character of wage structure the bigger farming units tend to keep labour input lower since their objective is to get highest net earning and not highest per acre output. It is in this reference that it has been shown that if total labour at small farms was to be valued at market wage rates, all the small farms would be seen as working on net loss i.e., cost being far in excess of the returns, even though output per acre in smaller holdings was higher than in larger units.⁽¹⁰⁾ It has never been disputed that small farms are more labour intensive than the bigger ones; as also, if land productivity is the criterion the land should be held in smaller cultivation units.⁽¹¹⁾

Charan Singh's
conclusions and
their Empirical
Base:

8. Charan Singh, on the basis of a table from the All India Report on Agricultural Census - 1971, concludes that

(10) See: Goyal, S.K., "An Enquiry into Behavior of Output and Costs of Paddy Production", Indian Economic Review Vol. IV, No.4, August 1959. Also see INDIA/Farm Management, (1957) and P.S. Pappu Ceilings on Large Holdings (1971).

Studies in
Economics of

(11) Charan Singh would in all probability accept these formulations but his concept of 'small' would include what is taken by others 'a large unit'.

re-distribution of land could be undertaken with advantage only in Andhra Pradesh, Madhya Pradesh, Maharashtra, Rajasthan, Karnataka, Gujarat, Punjab and Haryana. The table reproduced from Agricultural Census - 1971 shows Number and Area of Operational Holdings 1970-71 (see Table-I). Column 7 shows average size of holding in hectares. One does not know how can a view be had on the question of desirability or otherwise of land re-distribution on the basis of average size of holding in States.

TABLE - I
NUMBER AND AREA OF OPERATIONAL HOLDINGS 1970-71

Sl. No.	State	Number '000'	%	Area (000 ha.)	%	Average size of holding (ha.)
1	2	3	4	5	6	7
1.	Uttar Pradesh	15,639	22.2	18,158	11.2	1.16
2.	Bihar	7,577	10.7	11,480	7.0	1.52
3.	Andhra Pradesh	5,420	7.7	13,585	8.4	2.51
4.	Tamil Nadu	5,314	7.5	7,709	4.3	1.45
5.	Madhya Pradesh	5,299	7.5	21,194	13.1	4.00
6.	Maharashtra	4,951	7.0	21,179	13.1	4.28
7.	West Bengal	4,216	6.0	5,062	3.1	1.20
8.	Rajasthan	3,727	5.3	20,341	12.5	5.46
9.	Karnataka	4,551	5.0	11,368	7.0	3.20
10.	Orissa	3,407	4.3	6,449	4.0	1.89
11.	Gujarat	2,433	3.4	10,000	6.2	4.11
12.	Kerala	2,305	3.3	1,593	1.0	0.70
13.	Assam	1,964	2.8	2,883	1.3	1.47
14.	Punjab	1,375	2.0	3,974	2.4	2.89
15.	Haryana	913	1.3	3,447	2.1	3.78
16.	Jammu & Kashmir	979	1.4	916	0.6	0.94
17.	Himachal Pradesh	609	0.9	931	0.6	1.53
18.	Remaining States & U. Ts	814	1.2	1,854	1.1	2.28
	All India	70,493	100.0	1,62,124	100.00	2.30

9. If the argument of Charan Singh was to be extended at the national level, one should take a position (probably he would) that as per capita income in India is the lowest as compared to advanced countries of the world, there was no scope for re-distribution of incomes and wealth in India. There is, undoubtedly a powerful school of thought holding a view that poor countries should not be worried about disparities or inequalities; what should be sought, at first, is a rapid increase in per capita incomes. Such arguments are well known. We are also aware of the plea that redistribution of incomes and wealth in poor countries would only mean distribution of misery. In the same vein one can still recall an approach which pleaded 'let the cake grow'. There has not been any shortage of economists in early 'Fifties arguing for tolerance of disparities in incomes, as a necessary evil, to achieve higher marginal rates of savings for the economy. The basis used by Charan Singh to conclude that the scope for re-distribution of land was only in 8 states cannot, on any standard, be considered logical.

Extent of Inequalities 1971.

10. The appropriate data to have a discussion on the question of land re-distribution would be to study the pattern of distribution of operational holdings in India.

Table - II shows the size Distribution of Operational Holdings (All India).

TABLE - II
Showing Size Distribution of Operational Holdings
(1970-71)

Sl.No.	Size Group	Numbers (000's)	%	Area 000'ha.	%
1	2	3	4	5	6
1.	Less than 1.0 ha.	35,682	50.6	14,545	9.0
2.	1.0 - 2.0 ha.	13,432	19.0	19,282	11.9
3.	2.0 - 4.0 ha.	10,681	15.2	29,999	18.5
4.	4.0 - 10.0 ha.	7,932	11.3	48,234	29.7
5.	10.0 - and above	2,766	3.9	50,064	30.7
6.	Total	70,493	100.0	1,62,124	100.0

(Source INDIA, Agricultural Census 1971)

It can be seen that out of the total of 70.49 million operational holdings nearly half were of the size of less than one hectare. On Charan Singh's criterion these should be called below the floor level of 2.5 acres. These holdings, in the Agricultural Census - 1971, are defined as marginal ones. While the number of marginal farmers is more than half of the national farming community, their share in the cultivated land is 9.0 percent only. On the other hand, the number of holdings in the

size group of 10 hectares and above, would fall above the Charan Singh concept of land ceilings, is 3.9 percent of the total but their share in the national cultivated land is 30.9 percent. If one were to have a broad estimate of the likely surplus land, on Charan Singh criterion (allowing 10 hectares to each of the 2.76 million large farmers), should be around 22.4 million hectares. If, however, one takes the ceiling of 20 hectares the surplus would be 15.23 million hectares (See Table-III). However, according to Charan Singh about 8.67 million hectares only would have become available in 1970-71.⁽¹¹⁾ The essential point is that even to-day there are wide disparities in land holdings. The surplus land, if it were to be distributed amongst the marginal farmers can make a substantial change in the lot of the marginal.

11. A correct basis for viewing the problem of land re-
distribution would emerge from a study of the size-wise
distribution of operational holdings, for each State separately.
Table-IV shows the area under holdings of more than 10 hectares.
Column 4 shows the percentage area in large farms. It was only
J & K, West Bengal and U.P. where the area, under farms of
above the ceilings of 10 hectares, was less than 10.0 percent
of the cultivated area of the State. In all other States there

(11). Differences in the estimates are due to differing assumptions.

TABLE - III
Showing Number and Area of Operational Holdings
Size-wise (1970-71)

Sl. No.	Size-class (ha.)	Number 000'	Area 000'ha.	% (Number)	% (Area)
1	2	3	4	5	6
1.	Below 0.5	23,178	5,446	32.88	3.36
2.	0.5 - 1.0	12,504	9,099	17.74	5.61
3.	1.0 - 2.0	13,432	19,282	19.05	11.89
4.	2.0 - 3.0	6,722	16,353	9.54	10.09
5.	3.0 - 4.0	3,959	13,646	5.62	8.42
6.	4.0 - 5.0	2,684	11,929	3.81	7.36
7.	5.0 - 10.0	5,248	36,305	7.44	22.39
8.	10.0 - 20.0	2,135	28,821	3.03	17.59
9.	20.0 - 30.0	401	9,344	0.57	5.76
10.	30.0 - 40.0	120	4,178	0.17	2.58
11.	40.0 - 50.0	45	2,050	0.06	1.26
12.	50.0 - and above	65	5,971	0.09	3.68
13.	Total	70,493	162,124	100.00	100.00

(Compiled from Agricultural Census 1971)

still remain farms which are above the limit of the ceilings.

TABLE - IV
Showing Area under Large farms of Ten Hectares
and Above - State-wise

Sl. No.	State	Land above 10 hac.	Total Area	% 2/3
1.	Andhra Pradesh	4,174,099	13,585,744	31 %
2.	Assam	434,195	2,882,573	15 %
3.	Bihar	2,360,192	11,480,053	21 %
4.	Gujarat	3,644,875	9,999,638	36.5 %
5.	Haryana	1,178,207	3,447,456	34 %
6.	Himachal Pradesh	159,326	930,860	17 %
7.	J & K	22,489	916,452	2 %
8.	Karnataka	3,600,821	11,367,825	32 %
9.	Kerala	200,676	1,592,788	13 %
10.	Madhya Pradesh	7,979,168	21,193,919	38 %
11.	Maharashtra	8,469,682	21,179,425	40 %
12.	Orissa	807,445	6,448,713	13 %
13.	Punjab	1,004,374	3,974,091	25 %
14.	Rajasthan	11,620,646	20,340,550	57 %
15.	Tamil Nadu	1,003,046	7,709,208	13 %
16.	Uttar Pradesh	1,805,184	18,158,467	10 %
17.	West Bengal	231,771	5,061,631	5 %

Land Redistri-
bution: An
Obsession

12. In spite of the large disparities in operational holdings Charan Singh argues that:

"Anyway, the belief that distribution of surplus land available on imposition of ceilings was going to solve the problem of Harijans, the landless or the marginal farmers and thus remove poverty of the rural society to any appreciable degree, has proved a delusion. However low the ceilings that might be fixed, the acreage that could be available for distribution, was too little to go around all those who may need it or even a substantial section of them"⁽¹²⁾ (emphasis added).

Charan Singh puts his stand more clearly on the question of land redistribution when he states:

Obsession with land re-distribution which could at best, buy some time, should not, therefore, be allowed to distract our attention from the real cure of the ailment any more.

India's ruling party and its policy-makers had been mesmerized by the notion of land ceilings that the idea of land reform is almost exhausted by that one concept. The reason for their being in

(12) Charan Singh Supra Note 1, p.26

love with re-distribution of land is, perhaps not far to seek. The slogan came handy to the ruling party for abusing the so-called 'kulaks' and advertising its concern for the have-nots.⁽¹³⁾ (emphasis added).

Charan Singh's logic for Re-distribution: 13. It is obvious, Charan Singh has no love for opting to affect land redistribution. He, however, agrees to land re-distribution in areas where percentage of agricultural labour to cultivators is high. It is this adverse ratio that he considers responsible for emergence of communism in Kerala, West Bengal, Andhra Pradesh, Bihar and recently in Tamil Nadu. In such states, as "a demand was raised by have-nots" it was "rightly conceded by the political leadership".⁽¹⁴⁾ It is not an historical fact that land redistribution was conceded after "communism had raised its hands" in these States. The fact is that re-distribution of land was accepted as a major land reform as a part of planned socio-economic development. It has been all through accepted that the principles on which land reforms are based, do not merely involve adjustments between the interests of different sections of the population which depend on land, but are a part of a wider social and economic outlook which has to be applied in

(13) Ibid, pp. 26-27

(14) Ibid, p. 21 and Table (page 22) showing Percentage of Agricultural Labour to cultivators.

some measure to every part of the economy. The objective of land reforms, as visualized during the plans was to "assure equality of status and opportunity to all sections of the rural population".

14. How would the Charan Singh thesis meet the four aims he placed before himself for evolving a new agrarian structure? His aims were to ensure maximum production, full employment, equitable distribution and strengthening of democracy. (See para 2 above). As far the first objective of achieving highest productivity per acre, resulting in maximum agricultural production, it is obvious that without changing the present pattern of land holdings one cannot achieve this aim (unless one can substitute labour by capital in a massive manner). Larger farms may give higher marketed surplus per acre and provide more net return to the large farmers individually. But this would certainly not result in highest per acre productivity. There could be prosperity with the large holders of land but not in the sense of eradication of poverty.

15. The second objective of full employment is defeated the moment one wishes to leave large holdings un-disturbed. The per acre input of labour requirements would be lesser on two counts. One, rigidities of village wage structure would not leave incentive for large farmers to employ labour beyond a point. Two, with a desire to avoid all possible

labour disputes large farmers would opt for mechanization and labour saving implements. In any case, it appears it is in the scheme of things proposed by Charan Singh that more and more capital should be pumped on the large farms. In brief, Charan Singh would succeed in providing full employment to the bigger and well-to-do farmers and like to push most of the marginal farmers and landless labourers to the non-agricultural sector.

16. The third aim of reducing inequalities does not get any place in Charan Singh's proposed agrarian structure. In fact, he pleads for continuance of the system and shed the obsession that Indian planners have suffered from. The fourth objective of strengthening democracy is indeed the one in which, it appears the achievements would be in the reverse direction. There cannot be any democratic functions in rural areas where a large section of the population remains without land. Where does Charan Singh alternative lead us to ?

17. Experience of the last two decades of Indian agriculture shows that during the earlier part of planning, the essential reason for growth in agricultural output was in the enlargement of area under cultivation. During the second phase increases in agricultural output were essentially obtained by adoption of improved techniques of production, greater inputs in the form of irrigation facilities through extension of area under canals, sinking of tube-wells, installing of pumping sets,

use of power, and through greater use of fertilizers and pesticide.⁽¹⁵⁾ It is agreed that the scope for extension of net area under cultivation is very limited. The answer to higher agriculture production would, in future, be more and more related to the availability of enhanced modern agricultural inputs.

18. The first question needing a discussion is that can we take a general stand against heavy industry, the development of which is a pre-requisite, to enlarged production of power, cement and steel that is needed to give substance to large and medium irrigation projects, or development of fertilizers and chemicals ? Secondly, one must also question if with the given inequalities in land holding pattern, one can achieve a thrust in the agricultural programmes that would essentially go to uplift the poorest sections to end destitute by....., as promised in the Janata Manifesto ?

19. It has been recently argued that the Government in future would evolve a system that would have a built-in bias, in favour of the marginal farmers, in the matter of distribution of non-land inputs. How can this be achieved, is not spelled out. There is a massive amount of empirical evidence to suggest that pattern of land structure is the crucial element in determining the pattern of sharing state promoted inputs in agriculture.

(15) C.F. Rao, Hanumantha, C.H., Technological Changes and Distribution of Grains in Indian Agriculture, (1975), p. 4

20. It is an undisputed fact that there has been a big gap between 'profession and practice' in the matter of the implementation of land reforms. Charan Singh brings out that, according to official figures, as on July 9, 1976, nearly 4.397 million acres of land was estimated to be surplus; the declared surplus was 2.025 million acres; area taken under possession was 1.022 million acres; and area claimed to be distributed was 0.694 million acres only. Thus, of the estimated surplus only 15.79 percent was de-facto distributed. To explain this gap, Charan Singh has quoted Wolf Ladejinsky. It is explained

"that rich and well-to-do farm groups in India count very much in the inner councils of the Congress Party both in the Centre and the States, especially on election day -- though the number of those subject to ceiling is small, their influence is wide-spread through the control of local seats of power and much else -- the so-called 'vote banks' are still controlled by them as illustrated by the fact in the Punjab Assembly 45 out of the 64 members are rated as big owners, in Haryana the respective numbers are 30 and 52, and in Madhya Pradesh 96 out of 220 Congress Legislatures are reported to have holdings in excess of the declared limit." (16)

(16) Ladejinsky as quoted: Ibid, pp. 24-25.

Options: 21. It is true that land reforms have not been implemented
Land Re-
distribution: because of the absence of the requisite political will.

But what should one expect from the Janata Party? The options are:

i) Janata Party declares that 'land re-distribution' policies have been given up and disparities in pattern of land holdings would be allowed to continue as it believes that re-distribution of land is not a practical proposition. The obsession of the past would have no hang over.

OR

ii) The Janata Party recognizes the need for reduction of disparities in land holdings and unlike the Congress Party which allowed a wide gap between profession and practice, the Party stands for de-facto and vigorous implementation of the decision to affect land ceiling laws. Further, it would install adequate machinery to have objective assessment, with participation of the local population, to achieve a meaningful redistribution of land. The Janata Party would give its highest priority to plugging loopholes in legislation and all such cases where land ceiling acts have been evaded through fraudulent practices, would be re-opened.

Seminar
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Rural Unemployment and Poverty: Perspective and Issues

By

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RURAL UNEMPLOYMENT AND POVERTY: PERSPECTIVES AND ISSUES

The purpose of this note is to present alternative perspectives in relation to rural employment policy, and pose broad issues for discussion. Alternative perspectives may broadly be summarised as follows:

Perspective I:-

The growth in rural unemployment and rural poverty is due to distorted allocation of investments, wrong choice of techniques, an inappropriate output mix, and ill-conceived fiscal policies. Rural areas and agriculture were starved of investments. Capital-intensive techniques in the industries generated poor levels of employment. Output mix showed a tilt towards products in which labour intensity is low. Fiscal policies did not help to correct the distortions of poverty though there has been a phenomenal increase in the share of public expenditure since 1950s. What is needed is essentially a bigger allocation of public investments to agriculture, small scale industry and cottage industry. This will help to correct the distortions in investments, choice of techniques and output mix. Of course appropriate demographic policies are pleaded for.

Perspective II:-

The role of new technology in creating a class of entrepreneurs within agriculture is recognised. There needs to be realistic approach towards land reform. Given the need for a floor and limits to radical ceiling, a large class of landless are bound to be left without any benefits from distribution of land. This class is bound to grow as enterprising farmers within agriculture and below the ceiling limit begin to squeeze out the less enterprising and push them into the ranks of landless labour. These cannot be absorbed in household or small industries which

have very little market power to compete with the well established large industries, and props in the form of subsidies to them have rarely worked in the past and are not likely to work in the future. The infra-structure for agriculture needs to be developed in the form of better drainage and better irrigation and rural areas also need social amenities very badly. The vast reservoir of rural unemployed could be used to build up these. Agricultural development programmes addressed to the target groups could help to reduce the pace of proletarianisation. They will help to improve the production potential. The condition is that the rich must be willing to pay the taxes to maintain the employment of the poor.

Perspective III:-

The situation of mass poverty and mass unemployment is traceable to the legacy of unique patterns of interaction of colonialism with the traditional socio-economic structure. The groups which were low in the hierarchy of traditional social structure, the Scheduled Castes, service castes and lower groups among the artisan castes had only peripheral control over the major means of production, little participation in the decision making of the village community and had little access to education. They, however, were assured of survival within the traditional framework. These groups continue to be deprived of land, status within the village community and education even three decades after independence. Both demography and economics have resulted in sharper class differentiation even among the dominant caste groups. The consequence is we have (1) a large class of people who have only the labour power to sell, and (2) a significant proportion of people with a limited land base. Agricultural growth in rural areas, except in a few parts of the country, results only in a rise in percentage of people in trade and services and not in household industry. These

shifts are not favourable to the groups who are low in the traditional social hierarchy and who are getting proletarianised at an increasing pace. Even the little progress of agriculture is unevenly distributed between regions; a striking fact of the data is the negative rate of growth witnessed in a significant number of districts concentrated in areas with a significantly larger proportion of Scheduled Castes, Scheduled Tribes and Backward Classes. Two parallel features of the agrarian scene are simultaneous co-existence of transitional forms of capitalism in certain regions with semi-feudal forms in which forces of production are arrested because of various forms of subtle bondage. But in both regions the strangle hold of the rich over the masses is strengthened by the growing control over economic and political institutions which are integrated with the metropolitan centres. The manipulative powers of the rural rich in distorting the working of the rural institutions and subjecting the local beauracracy to their control cannot be underrated. The increasing concentration of marketed surplus also is indicative of the growing power of this class. Even in areas in which progress of agriculture has generated large surpluses as in the deltas of Andhra, these surpluses have not led to either a much higher degree of intensity of cropping or significant shifts in labour intensive cropping pattern. Instead they generated demand for machinery which could discipline the labour market, which, otherwise, might get out of the control of rich. An increasing direction in which the agricultural surpluses of the rich farmers are invested is investment in higher education. Witness the proliferation of affiliated colleges controlled by the rural rich. The state machinery, its political as well as administrative wings, have come increasingly under the strong grip of the rich. Public policies like

land reform, crash employment programmes, farm programmes oriented to target groups--all met with the same fate. Success stories are far less than stories of failure. Meanwhile the growing exchanges are between the rural rich and urban rich and rural resources are sucked more and more to meet these exchanges while the demand for the products of a large variety of consumer goods industries set up in the post-independence period was minimal from the bulk of the rural poor. Level of investment, allocation of investment, choice of techniques, product-mix are no doubt important but one could be suggested at the metropolitan centres; but they need to be designed and implemented at local level and in millions of villages.

It is at this level that policies get diluted and programmes fail to yield the desired results without radical changes in the power structure within the rural areas. The problems are serious at all stages--designing projects for creation of productive assets, implementing these effectively, and mobilise the resources for them. Capital accumulation within agriculture and appropriate technology are important, but fail to yield results in the absence of desired changes in the power structure in favour of the prospective beneficiaries. The main problem relates to revolutionary changes in the existing institutional structure and only within an altered context, knowledge of resources and technology could be made to benefit the masses.

Perspective I: This perspective is quite appealing. After all rates of growth in agriculture lag far behind the targets except for a few years with bumper crops. We imported heavily and a significant part of our large buffer stocks is out of

our imports. Would it not be then logical to argue that investments in agriculture were neglected. But this is an argument of post hoc ergo propter hoc. In fact in 1950s and even in the early sixties there were complaints of under utilisation of water, low demand for inputs like fertiliser and pesticides. With the advent of new technology in selected parts with adequate resource endowments there was a spurt in demand for inputs within agriculture. But in large areas like Kosi project area in Bihar where semi-feudal conditions still prevail growth in agriculture is inhibited due to institutional factors. In other areas resource endowments are poor and adaptation of technology to the specific agro-economic situation has been slow. While undoubtedly there is need for stepping up investments that benefit agriculture in specific areas like power and minor irrigation, deliberate neglect of investments in agriculture as the root cause of current plight of the poor is debatable. Even a dispassionate scholar of eminence of Prof. Dantwala finds no evidence to suggest that there was a deliberate neglect of agriculture in public policy.

One should recognise the serious constraints in achieving higher rates of growth which should now be based mainly on (a) rise in the intensity of cropping (b) shifts to high yielding crops (c) shifts from dry crops to irrigated crops and (d) shifts in cropping pattern. Rates of growth of production in agriculture of more than 3 per cent are not easy to achieve and were not found to have been achieved in the past except in limited parts with extremely favourable endowments. The growth of cottage and small scale industries as a measure of raising the levels of employment and income of the poorer sections of the rural poor cannot be ensured without protection from the onslaughts of

the superior market power of the large scale industry. Small scale industry has achieved success mainly when it is tied as an ancillary to a large industry. Household industry survived when their products are non-competitive with large industries as in the case of those which cater to the demands of the rich. But others which are engaged in the production of mass consumption goods can survive only if they are non-competitive with the products of large industry. An appropriate technology if and when devised may yield fruitful results. But until then they need protection if they are to grow. Since most of these cater to the needs of the poorer sections of the society, without stepping up the levels of income of these households these face marketing problems. The perspective implies an income policy of shifting income in favour of the poor to generate demand for the products as well as a policy of protection from the onslaughts of market power of large industry. Fiscal regulations in terms of excise duties and subsidies were not found to be effective instruments in the past and it is doubtful if they could be in future without further steps towards socialisation of large industry in direct competition with products of cottage and small scale industries.

Perspective II appears to have better logical consistency. It visualises family holdings within agriculture. Since a large number of rural labour force cannot be accommodated on these holdings or in cottage and small scale industries which cannot be expected to grow at fast rate, rural works programmes for the unemployed are recommended as the major means of creating the required infrastructure for agriculture as well as social amenities. The main problem relates to mobilisation of resources for providing adequate employment. An equally

vexing problem is one of planning and implementing projects which create productive assets as well as social amenities for the poorer sections of the society. The implication in relation to the availability of wage goods and of their prices are no less important. Crash Programmes of employment have more often turned out to be earthen road works which get washed off a few months after they are constructed. Political patronage in selection of projects has also not been lacking. In integrated tribal development programmes addressed to target groups quite a number of blocks could not be taken up because the beneficiaries are found to be non-target groups as a result of non-implementation of alienation laws in tribal areas. Vegetable cultivation on small farms even around urban fringes is not found to be as profitable a venture as it ought to be. Many of the vegetable growers in and around the urban fringe of Vijayawada are found to be small tenants who pay high rents and exorbitant water charges. Growing private appropriation of community resources like community pastures or tanks, tend to deprive the poor of what even free goods that they could get by utilising their labour to supplement wage incomes. In this context public authorities will have to increasingly atone for private sins. Fiscal instruments have not been found to be effective devices for mobilisation of resources on the scale that is needed for adequate employment in rural works programmes. An effective public distribution system to contain the prices of wage goods with the needed flexibility to suit the requirements of rural areas is difficult to operate without the vigilance that needs to be exercised by prospective beneficiaries. It is these critical issues of operating a large rural works programme for the benefit of the rural poor in a mixed economy with mass poverty that should make us turn to the third perspective.

Perspective III gains more relevance in the context of the difficulties in formulating a policy of anti-poverty and employment programmes with perspectives I and II. The anti-poverty and employment programmes will by their very nature have to be widely dispersed in thousands of blocks all over the country with a heavy concentration in areas identified to be lagging behind in growth rates of agriculture and even known to be achieving only negative growth rates. A time bound programme of elimination of unemployment within the next ten years calls for a rate of growth of employment roughly at rates double the growth rate of labour force, in rural areas considering huge backlogs of unemployment and underemployment. These call for additional expenditure within the next five years of the order of a crore of rupees in a block with a population of roughly 80,000 population. This order of investment is far higher than what was planned under the so called crash employment programmes in the past, which in many cases proved to be mainly earthen road works creating no durable assets and is bound to exert an upward pressure on wage goods. Fortunately the huge buffer stocks which are proving to be embarrassingly large could be used as has been suggested in many quarters under a foodgrain for works programme. But there are a large number other food articles which are in short supply, pulses, oils etc on whose prices, a public works programme of this order is found to exert a pressure. Foreign exchange resources could be of some help in easing this situation. But an effective public distribution system should become an integral part of an employment programme. The organisation of an effective public distribution system in the rural areas with all the flexibility it calls for to cope up with seasonal variations

in demand has eluded public policy in the past and could easily lead to several leakages without the vigilance necessary from an organisation of beneficiaries. The acquisition of supplies for catering to this public distribution system is a complex problem that calls for appropriate institutional arrangements.

The employment programmes would also call for a mix of projects which improve (a) Social amenities in the rural areas, (b) infrastructure for agriculture, roads, drainage, flood control, field channels and (c) improvement of farm assets of the individual small farmer in terms of a well, dairy, poultry that will generate more employment. In so far as (c) help to reduce the competition of the small farmer with the landless labour for the limited employment opportunities available they are helpful. They are also helpful if a larger number of households are enabled to produce the requirements of the households and as a consequence, the burdens on public distribution system are limited to a reduced proportion of non-producing and non-cultivating households. The experiences of SFD, MFD and ITD agencies provide useful guidelines. The land base of these groups; is small even in the deltas and even with shifts to HYVs and a higher intensity marginal farmers cannot be lifted above poverty line without additional incomes from supplementary household occupations as in dairying. Effective implementation of land programmes that will enable the village communities at least to acquire lands adequate for providing a fodder base to the small farmers should be found helpful. Consolidation of holdings is also felt necessary for extension of benefits to these groups. A disturbing situation even in respect of areas in which dairy development has advanced is the growing scarcities

of all types of food articles like milk, eggs, and vegetables. The worse victims of these scarcities are children. The nutrition programmes have also a bearing on population control programmes. Programmes of nutrition in the rural areas will have to be integrated with programmes of extension of school education. Thus an anti-poverty and employment programme needs to be integrated with an effective land reform programme, a public distribution programme and a nutrition programme for the benefit of the poor. In brief it is a rural resource development programme by the poor and increasingly for the use of the poor with wide income distribution and resource use implications both within the rural and urban sectors. Past policies in regulating resource use through systems of licensing, credit controls, price controls and fiscal measures have failed to yield results. Instead they have generated all-round corruption.

Egalitarianism within the rural sector alone losses the ethical base as long as growing ostentatious consumption in the urban sector is permitted and rural levels of living cannot be raised as long as resources continued to be sucked by islands of affluence within the urban sector. The question of rural employment relates to the wider questions relating to use of knowledge and resources for the poor. Possibilities of fine-tuning given to developed welfare states with islands of insular poverty are not open to countries with mass poverty. Purposeful denection of use of resources calls for an income policy investment planning and application of knowledge to priority areas of development. Extension of

social ownership/^{of} a wider range of large industry is an unpalatable suggestion for the powerful within the country, who are only too anxious to seek the alignment of multi-national corporations. But we owe it to the masses of this country to unfold the conflicts between the goals proclaimed by the Janata Party/^{and the} traditional instruments available and proposed to be used.

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Land Reforms, Industrialisation and
Private Enterprise: Some Linkages
and their Implications

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LAND REFORMS, INDUSTRIALISATION AND PRIVATE
ENTERPRISE : SOME LINKAGES AND THEIR IMPLI-
CATIONS

The exercise of public intervention and planning in India seems to indicate that the process of socio-economic development has run aground. Many hypotheses have been put forward to explain this phenomenon. One crucial factor common to almost all these explanatory models is the crucial role of dismal failure of agrarian reforms and rural institutional change. While there can hardly be two opinions on the role of the failures of land redistribution programmes in jeopardising the process of development, emphasis has generally been placed on various politico-administrative measures to complete the accepted programmes of land reforms, particularly the ones related to the imposition of ceiling on and redistribution of land. The crucial issue turns on what the Appu Committee called the "political will". Undoubtedly, nothing can be done in the absence of a real and effective political will. Nonetheless, political will, by itself, cannot go far in the absence of adequate and effective mechanism, instruments and their mode of implementation for accomplishing the historic, inevitable and long overdue task of land reforms.

True, the economic and political power of the rural oligarchy made a thorough implementation of land reforms a remote possibility. True, the failure to organise and

articulate the rural poor also contributed to the same end result. But land reforms were needed precisely in order to deconcentrate such power, which naturally saw to it that the organised strength of the poor does not countervail their power through land reforms. These things were as clear at the beginning of the day as they are, so to say, now at the end of it. Then, what were the other objective factors which led to the failure of redistribution of agricultural land? Was not the inability to deal with these relatively scantily realised factors the main force behind the undisturbed and expected exercise of the power of land ownership to frustrate attempts at land redistribution?

The power of land ownership increases manyfold owing to the utter dependence of the rural poor on the landed interests. This dependence is for jobs, for credit, for leasing land in, for leasing land out and for all kinds of sundry and mundane things which in their total impact constitute a total and formidable dependence. A little murmur and a little stirring to organise, to assert and to contribute to the implementation of land ceilings and land redistribution threatens a rupture of this well-entrenched dependence - a dependence which provides the rural poor the wherewithal and conditions for their

material existence and reproduction. Political mobilisation and consciousness and increasing difficulty of obtaining the minimum of sustenance from this dependence - (the existing social production relations) - weakens the stakes of the poor in the continuation of this set of relations of dependence. However, the increased profitability of agriculture following the introduction of the green revolution strategy seems to have strengthened the will and capacity of the rural oligarchy to sustain the relations of dependence. In brief, this dependence of the rural poor on the rural rich, with the increased will and capacity of the rural rich to maintain these relations, the worsening land man-ratio and absence of opportunities to escape the clutches of these inequitable relations make for the continuance of an uneasy, unfructifying balance in the rural India. This implies continued concentration of power in the hands of the rural rich and subsequently receding, dampening prospects of a thoroughgoing programme of land redistribution. This limits rural markets and hampers the growth of industries. This makes for a deepening and extending array of concessions, incentives and subsidies to the private industrial sector by the government to make the former expand. This, coupled with the power of the rural oligarchy, limits the mobilisation of resources by the public authorities - the problem of

paucity of rupee resources. This makes for a pattern of artificially forced pace of uneven, halting industrial expansion, which encourages capital intensity, metropolitan concentration and increased external dependence. One can go on to inter-relate all the facets of our contemporary reality to the cul-de-sac engendered by the failure to reshape and restructure the rural economy.

The contention behind this analysis is that since the land reforms are such a crucial link in the chain and their failure so basic to the continued dependence of the rural poor on the rural rich, both as a cause and an effect that unless other methods of breaking or weakening the dependence are not successfully adopted, it may not be possible to take the crucial step of successful land redistribution. More precisely, so long as land remains the most easily visible and hence the most coveted source of livelihood and wealth, there is likely to persist and get intensified a fierce competition to own, operate and/or work on land as one's situation permits. Given our land-man balance and paucity of economic opportunities outside agriculture, this struggle for and attachment to land is difficult to be weakened. So long as the importance of land remains so high and, in fact, increases, the dependency relations of the rural poor are likely to persist and make land redistribution programmes a virtual

non-starter. The rural poor do not have the independence necessary for the mobilisation necessary for successful land redistribution.

How to get over the dilemma? Land reforms require the organisation and mobilisation of the rural poor. The rural poor can acquire the will and capacity for such mobilisation if their day-to-day direct dependence on the rural rich is substantially reduced. If too many small and marginal farmers and the landless did not compete for the favours of the rural rich and were not dependent on them the social, economic and political power of the rural rich will be lowered. But so long as productive work opportunities outside agriculture do not grow at a sufficiently rapid pace, the dependence of the rural poor on the rich landed interests is likely to remain near total. Consequently, their mobilisation and capacity to intervene for land redistribution will remain muted and ineffective.

On the other hand, non-agricultural work opportunities do not expand sufficiently because increasing concentration of land ownership gives rise to a distribution of purchasing power unkind to the growth of industrial employment and output. Attempts to tackle the basic impasse through various controls, subsidies, incentives, etc., to private industrial enterprise create cesspools of black

money, corruption and concentration without generating either sufficiently high rates of growth of employment in order to release the basic lever in the rural economy, i.e., reduce the dependence of the rural poor on the rural rich and thereby create the essential, objective conditions for successful land redistribution.

If the scheme of interconnections visualised above is correct, then the inter-locking circle can be broken through a substantial and fairly rapid expansion of secondary sector, industrial work opportunities for such a large number of the rural poor that their dependence on the rural rich is substantially weakened. Given our over expansion of it, the tertiary sector employment can give no or little answer to our problems. This coupled with effective steps to prevent the spread of labour-replacing machinery by the rural rich can create conditions in which a frontal assault on the problem of land redistribution in favour of small peasants and the landless can take place.

What are the conditions needed for such a miraculous performance on the front of industrial employment and production?

II

Placed as we are presently, there does not seem to operate the physical constraints like the availability of

machinery, wage-goods, foreign exchange, skills and technology inhibiting the expansion of industries. Raw materials, whenever short, can in the present context be imported. It is true that perhaps there may not be available a ready stock of appropriate technologies, but given steady demand, mechanisms seem to exist for a fairly steady pace of creation of such technologies. Despite these favourable factors, the performance of the economy on the industrial front, taking both a short and a long view, cannot be considered happy. For example, employment in mining, manufacturing, energy and construction sectors/^{which} was around 38.50 lakhs in the private and 13.25 lakhs in the public sector in 1961 rose to 44.04 and 33.42 lakhs in the private and the public sectors respectively in 1976. At these rates, one cannot attain full employment for a disconcertingly long-period and the pressure on land will keep increasing. Given this scenario, land redistribution cannot be achieved.

The corporate sector in India, which dominates the modern organised sectors of the economy, has not been able to grow at a rate and in a manner which can respond to the tasks enjoined upon our industrial and modern sector's development. Today we have about 46,000 companies with about Rs. 10,000 crores of paid up capital. Their total assets are of a still higher magnitude.

In 1966 when total paid up capital of all the companies was of the order of about Rs. 3,000 crores, their total assets net of depreciation stood at almost Rs. 12,000 crores. Even if a similar ratio has not obtained, on account of the growth of other sources of internal, external, government and public financial institutions contributions to the corporate resource kitty, the total corporate assets can easily be assumed to be at least of the order of Rs. 25,000 crores. The corporate sector also includes government companies, which though number about 700, contribute about two-thirds of the total paid-up capital of the corporate sector. In 1957, non-government companies accounted for over 93 per cent of total corporate paid up capital. In 1976, their share has declined to about 30 per cent and government companies share has shot up ten times. Of the non-government companies numbering about 45 thousand, there is a great deal of concentration in the hands of the large industrial houses. The table below gives some estimates of the assets controlled by the twenty large industrial houses.

Estimates of Assets of 20 Large Industrial Houses

	Monopolies Inquiry Commission (1963-64) Rs. 1325.7 crores	ILPIC (1966-67) Rs. 2089 crores
Deptt. of C.A. (1974) Rs. 3590.04 crores	Economic Times (1974-75) Rs. 5111.2 crores	

Though the assets of the larger industrial houses are growing at a fairly rapid rate (a four-fold increase since 1963-64), the same cannot be said of the rate of growth of capital formation, employment and output in the non-government corporate sector. In 1975-76, the total project costs connected with capital issues amounted to Rs. 257 crores and it came down to Rs. 65.65 crores in 1976-77; corresponding figures for capital issued to the public being Rs. 39.20 crores and Rs. 15.63 crores respectively. That is to say, those who are operating in the non-government corporate sector assets of the order of about Rs. 10,000 crores or so, and have been, according to a study by the Tata consultancy done for the FICCI, earning a net rate of return of about 9 to 10 per cent, are able to float projects costing Rs. 66 crores to Rs. 160 crores only.

A look at the pattern of financing these project costs of the order of Rs. 257 crores is also revealing. Internal resources contributed 6.35 per cent, public issue about Rs. 34.38 per cent and to cap all, subsidy from the Central government and loans from the public financial institutions 54.66 per cent of the total project cost. It is difficult to judge the employment implications of these projects. However, their capital intensity is apparent from the fact that the working capital constituted

10.44 per cent of the project cost indicating the sums available for wage-payments, raw material purchase and inventories. Plant and machinery and other fixed assets accounted for 62.80 per cent of the cost, while land and building took another 10.82 per cent.

Another facet of the new companies floated is that they tend to be concentrated in the four industrially advanced States with metropolitan cities. In 1975-76, West Bengal, Maharashtra, Tamil Nadu and New Delhi accounted for 60.71 per cent of all the companies formed and the percentage in 1974-75 was 61.79.

A closer look at the industrial pattern of corporate investment may also be worthwhile. Chemicals and metals attracted the biggest investment, 39.63 per cent in 1974-75 and 40.93 per cent in 1975-76. Manufacturing of all types accounted for 77.85 per cent in 1974-75 and 73.90 per cent in 1975-76. Commerce keeps attracting around 11 per cent of total investment. Thus, the industrial and manufacturing bias of the investment, with emphasis on chemicals and metals, speaks of the maturity of our industrial structure.

There is nothing surprising about such a pattern of corporate investment behaviour. Despite the plethora of controls, regulations, incentives and subsidies,

corporate investment has been unable to deliver goods both quantitatively and qualitatively. A major factor has been the demand constraint in the case of goods which can give high rates of growth of output and employment. Given rural and industrial concentration, it is again the demand factors which have given rise to distortions in industrial location, techniques, product-mix, etc. The relative rates of return ⁱⁿ trade, speculation, real estate dealings, money lending, production of luxury and semi-luxury goods and in the vast black market economy along with demand constraints effectively curb the rate of growth of private industrial investment, particularly in mass consumption goods based on local resources and technologies appropriate to our resource endowment. The small modern sector and the traditional artisan sector have shown fairly good results in absolute terms; but the competition from the organised large industries in the economic field and also at the political level in terms of public policies have seriously handicapped them from discharging a real life size role. The available studies about the role of foreign private capital and import of technology too show similar weaknesses and distortions.

III

In contrast to the favourable position regarding physical and technical resources for fast industrial

development to take the excessive pressure off the land and generate massive employment, we find that there are some formidable restraining and distorting factors also at work. As discussed earlier, lack of adequate demand, timid, mercantilistic, foreign products and technology-aping behaviour of private industrial investment, relatively disadvantaged position of the small and the artisan sectors, high capital-intensity techniques producing goods for elite consumption mark our industrial scene. The public sector is faced with demand constraints, inadequacy of resources for further expansion and absence of political support to advance and diversify.

The question then is, how to bring about rapid growth of industrial employment using local resources and producing goods of mass consumption. There are formidable problems facing the non-government corporate sector and the small and artisan sectors. Public sector suffers from the lack of rupee resources for investment. Basic to all these problems is the endemic fact of industrial and agricultural concentration. The concentration causes lack of widely diffused purchasing power, discourages the growth of small industries, limits resources available for investment in public sector, creates market pressures inimical to high labour-intensity and by keeping the rate of growth of non-agricultural, industrial employment low,

increases the premium on land ownership. This causes an increase in the power of the land owners of whom about 4 per cent control about 30 per cent of total cultivable land. It has also been the experience in India that various regulatory and promotional policies and measures to step up the rate of private industrial investment and give it a growth and equity promoting character have led to counter productive results exacerbating concentration and corruption which inevitably get reflected in expansion of black market transactions, price rise and growth of merchant and rentier capital.

It follows that in the process of reversing the direction of the operation of these intertwined, interlocking factors crucial role belongs to sharp, substantial and speedy deconcentration in the field of private industry. Even here a major hurdle may be faced in the form of the problem of paucity of resources for the payment of compensation if extensive taking-over of monopoly-houses dominated industrial enterprises is to be attempted. However, the fact that the bulk of the industrial assets are financed by loans from public financial institution under convertibility clause agreements comes as the saving grace. As the Industrial Licensing Policy Inquiry Committee suggested, an activation of this clause gives the public authorities a tremendous lot of

power over the economic surpluses generated in some of the most profitable industries, where, let it not be forgotten, the reported and disclosed profits are only a fraction of the real aggregate surplus cornered. Apart from the deconcentration effect produced by the use of convertibility clause to vest decisive control over industrial production and surplus disposition, this measure can go a long way in creating massive employment for the rural and urban poor. The rate of investment can go up by a massive ploughing back of the surpluses of these enterprises to which public savings have contributed substantially and yet it will be, at most, a partial take-over.

However, the aims of deconcentration cannot be achieved entirely through the use of convertibility clause. There is the problem of current and impending sickness in industries, particularly in the traditional industries. Enterprises faltering owing to mismanagement must be taken-over and failing managements penalised. However, in industries like cotton textiles, jute, sugar etc., where the comparative elasticities of expenditure are not particularly high and in which technological change is slow, relative profitability declines reducing the pull for investment in modernisation and expansion. The fact that these industries are prominent agro-based

industries, where overall productivity will also be related to farm productivity and additionally have to face the problem of protecting the dispersed growers against the oligarchy of the industrialists, there is a strong case for take-over of these industries. This will also have significant deconcentration effect. Foreign capital in low technology lines too will have to be eased out.

IV. CONCLUSIONS

These measures involving industrial assets of about Rs. 10,000 crores or so, will put into the hands of the State a surplus of about Rs. 1000 crores annually. A ploughing back of resources of this magnitude as paid-up capital, supplemented by resource contributions from public financial institutions, will amount to a massive dose of investment. If such an expansion of public sector is directed towards mass consumption goods, based on labour-intensive technology and local raw materials and their location is dispersed to small towns and rural areas, assuming that it takes an investment of about Rs. 10,000 for employing one person, a direct employment contribution of about a million jobs annually can be expected. The indirect multiplier effects of industrial employment of this order will also be significant. The impetus given to small scale and artisan sector by

Table-II

Industrial Pattern of New Non-Government Companies
(Capital in Crores of Rs.)

Industrial Classification	1975-76		1974-75	
	No.	Authorised Capital	No.	Authorised Capital
1	2	3	4	5
0. Agricultural and Allied activities	51	4.3	72	5.4
1. Mining and Quarrying	29	1.7	34	4.3
2. Processing and Manufacture of foodstuffs, textiles, leather and products thereof	319	42.2	369	66.5
3. Processing and Manufacture-Metal and Chemicals and products thereof	950	110.4	1,223	151.4
4. Processing and Manufacture-not elsewhere classified	360	46.7	446	79.5
5. Construction and Utilities	61	6.4	94	10.0
6. Commerce (Trade and Finance)	776	30.1	968	43.5
7. Transport, Communication and Storage	95	11.1	102	7.2
8. Community and Business services	172	8.0	169	5.8
9. Personnel and other services	111	8.8	125	8.4
Total	2,924	269.7	3,602	382.0

Source: Company News and Notes, March/April, 1977, Vol. XV., p. 15.

Table - III

State-wise Distribution of New Non-Government Company Registrations

		(Authorised Capital in crores of Rs.)			
		1975-76		1974-75	
S.No.	State/Union Territory	No.	Authorised Capital	No.	Authorised Capital
1	2	3	4	5	6
1.	Maharashtra	666	52.0	866	80.5
2.	West Bengal	517	40.4	588	46.4
3.	Delhi	386	25.2	483	38.3
4.	Tamil Nadu	206	30.3	289	41.6
5.	Karnataka	201	19.2	223	21.5
6.	Gujarat	187	10.8	180	17.2
7.	Uttar Pradesh	143	7.2	199	15.3
8.	Other States	618	185.3	774	121.2
Total		2,924	269.7	3,602	382.0

Source: Same as for Table - II, p. 14.

Table - IV

Project Cost of Companies Issuing Capital During 1975-76

(Amount in Rs. lakhs)						
Sl. No.	Item on which amount to be spent	New Pub-lic Limi-tered compa-nies	Private Ltd. Com-panies convert-ed into Public compa-nies	Existing Public Limited compan-ies	Total	% of Col.6) to total of col.6
1	2	3	4	5	6	7
1.	Land and Buildings	1756.72	847.11	180.93	2784.76	10.82
2.	Plant and Machinery	9562.32	4145.40	967.09	14674.81	57.01
3.	Miscellaneous fixed Assets	669.23	634.70	187.34	1491.27	5.79
4.	Working Capital	995.87	1191.85	499.54	2687.26	10.44
5.	Technical know-how	389.82	161.00	15.60	566.42	2.20
6.	Issue Expenses	229.99	123.95	64.29	418.23	1.62
7.	Pre-incorpora-tion, Pre-opera-tional and pre-liminary expen-ses	1344.24	540.89	72.76	1957.89	7.61
8.	Contingencies	777.64	311.56	71.25	1160.45	4.54
Total		15725.83	7956.46	2058.80	25741.09	100.00

Source: Same as for Table - II, p. 21.

Table - V

Financing of Project Cost of Companies Issuing Capital During 1975-76

(Amount in Rs. lakhs)						
Sl. No.	Source of Finance	New Pub-lic limi-tered com-panies	Pvt.Ltd. compani-es con-verted into public compa-nies	Exist-ing Public Limit-ed compa-nies	Total	% of Col.6 to total of col.6
1	2	3	4	5	6	7
1.	Share Capital (Indian)					
	(a) Equity	5080.12	2207.91	822.75	8110.78	31.51
	(b) Preference	338.00	136.50	189.50	714.00	2.77
2.	Share Capital (Foreign)					
	(a) Equity	4.64	--	--	4.64	0.02
	(b) Preference	--	--	--	--	--
3.	Reserves and Cash Accruals	70.02	1468.00	97.75	1635.77	6.35
4.	Debentures/Bonds	--	--	20.00	20.00	0.08
5.	Deferred payments	413.73	97.91	--	511.64	1.99
6.	Subsidy from Central Government	108.34	--	--	108.34	0.42
7.	Loans from :-					
	(a) I.F.C.I.	978.69	321.90	95.00	1395.59	5.42
	(b) I.C.I.C.I.	1211.79	492.62	234.10	1938.51	7.53
	(c) I.D.B.I.	2577.40	706.00	235.17	3518.57	13.67
	(d) U.T.I.	35.00	75.00	20.00	130.00	0.50
	(e) L.I.C.	893.00	367.00	60.00	1320.00	5.13
	(f) Banks	2850.63	1569.47	189.53	4609.63	17.91
	(g) State Finance and State In-dustrial Deve-lopment Cor-porations of India	505.20	425.54	67.00	997.74	3.88
	(h) Promoters, Directors and friends	244.24	24.21	28.00	296.45	1.15
	(i) Others	365.03	64.40	--	429.43	1.67
Total		15725.83	7956.46	2058.80	25741.09	100.00

Source: Same as for Table - II, pp. 21-22.

(Restricted Circulation)

Seminar
on
Economic Policy Options
(24-25 September, 1977)

Planning for Employment:
Some Observations

By

T.S. Papola

Venue: Indian Institute of Public Administration,
Indraprastha Estate, Ring Road,
New Delhi.

PLANNING FOR EMPLOYMENT : SOME OBSERVATIONS

I

Several approaches have been experimented in the past and are being advocated currently to tackle the problem of unemployment. For some time, growth itself was treated as an objective separate from the objective to raising production levels. Certain sectors, particularly small scale and consumer goods industry were expected to take care of the problem of unemployment whereas the large scale and heavy industries were emphasised with a view of building the necessary condition for modernised, self-reliant and rapidly growing economy. Of late, special programmes have also been devised, on the periphery of the production plans, as short term expedients to deal with the problem.

None of these approaches has yielded the desired results. The back log of unemployment has increased from year to year and plan to plan. On the basis of rough estimates, the open unemployment is reported to be around 14 million; and if the man-years lost or unutilised due to unemployment are also considered, the total unutilised human resources in the country will make a staggering figure. The open unemployment itself will constitute about 7 per cent of the labour force and adding to it the unutilisation of labour due to lack of work for the whole year, the utilizable unutilised manpower may take about

one-fourth of the labour force. It is, therefore, natural that a lot of concern has recently been expressed about the pattern of development with a view to ensuring employment to all those capable of and available for work. Intensive and extensive discussions were held at the time of the preparation of the Fifth Five Year Plan about the desirability and feasibility and employment-oriented planning. At the end, however, it was not thought desirable to change the model of planning which has been in operation for quite some time, but it was considered necessary to devise special programme for creating employment. During the last few years, however, a consensus seems to be emerging among the economists, policy makers and others that it is necessary to make employment a central theme in the planning process. The search for appropriate methods of doing it is continuing and a solution still seems to be eluding the policy makers. There have been all kinds of suggestions ranging between stepping up the rate of growth which by itself will take care of the problem, on the one hand, and starting the planning exercise with the number of jobs to be created as the central objective, on the other. In choosing between alternatives it may be worthwhile to consider the propositions outlined in the following paragraphs.

II

First, it needs to be emphasised that the tendency to portray growth and employment as competitive objectives should be checked. It is true that even though the Indian economy has grown at an average annual rate of over 3 per cent during the last 25 years, the employment growth has lagged behind. This is an obvious result of increase in productivity, that is production per worker, in all the sectors; the increased productivity has maintained a trend rate of around 2 per cent per annum and therefore, the employment has grown at a nominal rate of 1 per cent per annum. And this meagre rate of employment growth has fallen far short of the 2.5 per cent annual growth in the labour force. An earlier exercise by this author suggested that if the rate of growth of national income had been the same as targetted in the Five Year Plans, namely, 5 per cent per annum, during the period 1950-51 to 1973-74 the problem of employment would no longer have been with us today. Further, a rate of growth in output of the order of eight per cent per annum, without any major structural and technological changes, but with the continued trend rate of 2 per cent in productivity increase, all those employed in 1974 and the new entrants in the labour force during the next 5 year period could have been provided jobs

by the end of the Fifth Five Year Plan. On the same assumptions, the required rate of growth to eliminate unemployment by the end of the Sixth Plan would now be around 10 per cent per annum. Obviously, the past experience as well as an assessment of the availability of resource with the economy suggests that such a rate of growth would be unattainable.

Thus, even though achieving a high rate of growth in output is essential, that may by itself not be sufficient for solving the problem of unemployment unless it is as high as indicated above. At the same time, it cannot be considered desirable to revert the planning process into an exercise of creating jobs without providing for the production of commodities required for current consumption as well as for future production. The solution is then sought in terms of changing the investment and production pattern and introducing such techniques of production which create larger number of jobs per unit of capital. Here again, the given structure of the economy and the pattern of investment made in the past have to be kept very much in view, as the built-in capacity cannot and should not be dismantled nor should it be allowed to lie unutilised. It is true that in spite of the best intention of the framers of the basic strategy of the Indian Planning and their efforts to create a balanced structure of production, the economy has exhibited serious

imbalances in its production pattern in the last decade, particularly in the form of acute shortages of wage goods and intermediate products and a high degree of under-utilisation of capacity in the heavy industry and also in the large scale consumer goods industries. The reason for this imbalance is attributed to the relatively larger investments made in the heavy industry sector, low priority accorded to wage goods production and an employment and income pattern which created excess demand in the low production sectors and lack of effective demand in the lines where capacities have been built. It may be worthwhile to have a re-look at this strategy and correctives may be introduced to remove these imbalances. But at the same time the heavy industry sector will have to be continued as an important claimant of investment in the long range growth perspective.

III

It is in this context that the proposal sometimes being mooted in some quarters that industrialisation needs to be pursued less rapidly during the next decade or so seems some what difficult to swallow. Even if the pace of investment in the heavy industry sector is slowed down, from the view point of production of wage goods and providing employment, the consumer goods industry will have to grow rapidly. For, even if agriculture grows at a rate of 3

per cent per annum, a rate which has been considered essential, but seems a little unrealistic both in view of the past trends as well as the limitations on growth in agricultural output, it would not suffice for providing income and employment of the opportunities to large number of the rural population. And if the recourse is mainly made to the tertiary sector particularly social services for creation of additional jobs, the inflationary implications of the proposal may be highly uncomfortable. Moreover, the programme for employment creation should not be such that would cease generating jobs after a given period, but should continue to create employment on a sustained basis. In this context, programmes like construction, although very important from various other view points, have their own limitations as elements in a long term strategy for employment creation.

The other element in the planning for employment is technology which ultimately gets reflected in the capital intensity and labour productivity. Theoretically, it is conceivable to have the same output produced with different combinations of capital and labour. In practice, however, there are severe limitations on switching from one technique to another. First, in most of the cases, a product has a technology identified with it at least for some years.

That is, coefficients of production are more or less fixed. It is possible to change the product but it is difficult to vary the combination of inputs to produce the same output. This situation has been found to exist in a larger number of Indian industries as revealed by several studies undertaken on this subject. Secondly, even if technological flexibility is possible, the change of plant and equipment may not be within the capacity of the entrepreneur or he may not find it profitable to switch over to the new technology. Thirdly, in many cases raising the levels of production and efficiency of all the resources used in production necessitates changing technology more often in favour of capital than of labour. This is largely true in case of agriculture, small industries and agro-based industries. It does not, therefore, seem easy to make any substantial impact on the employment front by changing techniques of production. It is, however, true that certain activities do have higher employment potential than others. A change in the pattern of production in favour of these activities seems the only solution, other than raising the rate of growth itself, for employment creation. In view of the facts that basic infrastructure for the development of such activities has already been laid down in the economy and that the output of these activities is by and large needed in the country, emphasis on these

activities is certainly warranted.

IV

Agriculture could be considered as one of these activities to the extent it is not only provides livelihood to a large number of people but also supports a large number of other activities. However, as pointed out earlier, the rate of growth of employment in agriculture may hardly match with the rate of growth of manpower in the rural areas, for the following reasons. First, even assuming a constant productivity per man-day, the agricultural production will have to increase by over 50 per cent over the next ten years with a view to providing full time productive employment to the entire existing labour force in the rural areas, as over one-third of the available man-days are estimated to be currently unutilised. Secondly, with the necessity to introduce mechanisation and electrification of agricultural process, the productivity per man-day is bound to increase in agriculture. Thus not only the under-employed but even the number of people required on a full time basis to support a given level of production might decline. Thirdly, the new entrants in the rural labour force will substantially add to the already unemployed. Therefore, a shift in the employment pattern reducing proportion of employment in agriculture seems inevitable.

A major shift of this type would, however, require a fast growth of the manufacturing and services sectors. Further, given the fact that the economy may at best grow at an annual rate of 5-6 per cent per annum, to provide productive employment to the all unemployed by the end of the Seventh Plan, the increase in gross domestic product during the next 10 years period about 2/3rds will have to be contributed by increase of hands and one-third by additional employment. It may be a desirable departure from the view point of employment creation. The problem is whether in the process of concentrating on the creation of jobs proper care could be taken to ensure efficiency. If that is not done, productivity may not increase even to the extent it is envisaged to increase. And it may create problems for sustaining growth of output as well as employment in the long run.

The two sectors which are supposed to be able to bear the main thrust of the programme of employment creation are: small scale industry and services. Both these sectors have exhibited problem of inefficiency and slow growth in the past. It may not be desirable to emphasise any industry for employment creation simply because it happens to be operated on the basis of small units. There are small units which have the same or even higher capital

intensity than the large scale units. The choices has to be made primarily product-wise so as to ensure both the adequate supply of consumer and intermediate goods and to generate employment. Studies need be made in depth to identify such lines of activities.

The services sector generally expands in some proportion to the strictly productive sectors in the economy. A sudden spurt in investment in the services sector, may create problems of demand and inflation because the investment in services takes some time before its contribution to the productive activities starts being felt. Here again the emphasis needs to be laid on creation of infrastructure to support productive activities rather than heavily loading the programmes with social services.

V

At the end, a word may be said about the priorities in employment creation. Basically, there are three types of unemployed in the economy. First, a large number of people are under-employed; engaged in some activity for only part of the year and making their livelihood, at howsoever low level. Secondly, there are a number of people openly unemployed in the rural, but more particularly in the urban areas. Of the latter, a large

segment consists of people with education higher than matriculation. Distinction can be made among these segments of unemployed according to the degree of which their unemployment results in poverty and destitution. For the uneducated unemployed, more particularly in the urban areas lack of work means virtually starvation. To a large extent, this is also true of the rural openly unemployed. So far as the educated unemployed is concerned, it may be noted that given the highly inequalitarian system of education prevailing in the country, the educated unemployed do not necessarily come from the lowest rung of the economic ladder; education in colleges and universities pre-supposes one or two earners in the family of the student. In these cases the problem is not so much economic as social and political. It is not being suggested that the discrimination is made against any segment of population, for unemployment is certainly bad for any one, but it is worse in such cases where alternative to work is destitution and starvation. Therefore, in the immediate short run programme the priorities need to be fixed in favour of the unemployed in whose case unemployment is coterminous with poverty.

VI

Let us now recapitulate the major propositions discussed in the above paragraphs. First, the higher rate of growth is

the surest way of generating the sustaining the high level of employment. Creation of jobs by producing a given level of output with the use of larger number of hands and thereby reducing productivity may not be a desirable strategy for employment creation in the long run. Second, while growth rate in agriculture needs to be stepped up both for providing food supplies as well as the materials and demand for non-agricultural products, the major source for employment creation will have to be found outside agriculture. Therefore, the non-agricultural sectors will have to grow fast if the objective of full employment is to be achieved. Third, it may not be a very wise policy to go by the assumption that any activity carried on a small-scale basis has necessarily a greater employment potential per unit of capital or output than the one carried on a large-scale basis. It is desirable to go by products rather than size and studies should be undertaken to identify, for different areas, such products which have the potential for creating greater employment per unit of capital without a significant loss of efficiency. Lastly, while these measures would succeed in providing full employment in the long run, the strategy for employment in the short-run should primarily be focussed on such sections of population where unemployment is coterminous with poverty.

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(Restricted Circulation)

Seminar on
on
Economic Policy Options
(24-25 September, 1977)

Politics and Economics of Full-Employment

By

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POLITICS AND ECONOMICS OF FULL-EMPLOYMENT

The election manifesto of Janata party on the eve of the March 1977 Lok Sabha elections pledged an "affirmation of the right to work and full-employment strategy". It committed itself to a policy for "statutory reservation of spheres of production for small-scale and cottage industries. It also promised "an end to destitution within ten years". Considering the past, these were very revolutionary and bold commitments. Even after assuming power, its leadership asserted that full-employment will be achieved in this country within a period of ten years.

This really implies a complete change in emphasis with regard to our economic policy. It means planning for full-employment. All these years we have hardly planned for full-employment. We have planned mainly for the so-called growth of per capita income. In our planning models the objectives of growth of capital and income figures much more prominently than employment creation which came to be looked upon as a by-product of growth of capital. The reasons are not far to seek.

As a matter of fact, none of the dominant among the ruling classes were interested in full-employment. Planning

for full-employment would have resulted in a high wage economy. It was definitely not in the interest of the bourgeoisie and the imperialism was positively against it. It was, therefore, not surprising that almost all the developing nations, implicitly or explicitly, accepted the fact that the number of persons remaining unemployed or under-employed would continue to increase for a few decades if not more. Low wage and chronic poverty were a boon in disguise for the elites of the semi-feudal system in rural India. But their opposition to a full-employment policy was neither very conscious nor in any way articulate. On the other hand the Indian industrialists mostly welcomed the public sector development of strategic industries which were essential for development of other industries in private sector but which would not have attracted private investment in a situation such as ours.

Western academic influence had its own part to play in this context. In a theoretical framework, under certain assumptions it was shown that if employment was pushed beyond the limit where marginal product of labour equalled wages, it will lead to a decline in surplus and hence, in investment and capital formation and, therefore, growth of income and employment will also be adversely affected in the long run. Even though this theoretical model did not have any

empirical support, it came in handy for the ruling classes. Planning for full-employment was shelved effectively. But as we sacrificed employment for growth of income, we did not achieve the later. The annual average rate of growth of per capita net national income remained less than even one half during the last 26 years of our planning. The outcome could not have been different.

But this did not mean that the ruling classes did not talk about employment. They showed their concern about it. Some factions were even critical about the official policy. The political debate went on endlessly. There were promises and counter-promises obviously in a bid to win over the petty-bourgeoisie, the organised working class and the rural and urban poor to their side. These promises sometime took shape in the form of ad-hoc employment schemes like CSRE and PIREP. The latest is the Employment Guarantee Scheme launched by the Maharashtra State Government. But since these were never meant to make real dent on staggering level of unemployment and under-employment, their impact was never felt.

In a situation such as ours, there is no reason why even in short-period the objective of full-employment should come in conflict with that of growth of capital and income. There is no empirical evidence to support the conflict

hypothesis. On the other hand, the scanty empirical evidence that we have, shows that the rate of growth of income increases with the rate of growth of employment. And therefore, in the interest of overall rapid development of the country, there is no alternative but to plan for achievement of full-employment within a period of less than ten years' time. Even though the dice is slightly loaded against such a policy because of a very high backlog of unemployment, we have certain advantages also. We have sufficient buffer stock of food-grains, a likelihood of a good crop this year, an agricultural technology which is size-neutral, favourable balance of payments position, a comfortable foreign exchange reserve and a network of developed strategic industries.

Agriculture alone, in a situation such as ours, can play a major role in a strategy for "full-employment with growth". Indian agriculture can absorb a lot more persons in gainful employment than is normally realised. Agriculture in Japan employs six times more mandays per acre than that in India and about 99 per cent of holdings in Japan are a little less than three acres size. With a rapid rate of growth of employment in agriculture in India, we will have a rapid rate of surplus generation (a source of rapid investment) and also expansion of domestic demand

for mass consumption goods for increased utilisation of existing industrial capacity and rapid expansion of industries. This then will be followed by a host of related activities in other sectors of our economy.

Indian agriculture suffers from two major defects. One is the wide-spread semi-feudal production relations which operates as a drag on intensive utilisation of land and other infrastructures meant for agricultural development. The other is our failure to solve our water management problem efficiently. Floods and famines are as frequent to-day as it was a quarter century earlier. To overcome these two major defects, we need massive investment in irrigation, flood control, afforestation and power generation so that we are able to put to use fully and efficiently the existing known potential related to ground and surface water resources for agricultural purpose and to prevent the erosion of land, effective implementation of the existing land reform laws followed by consolidation of holdings and statutory reservation of some spheres of activities for such techniques and methods which would provide supplementary income to the rural poor.

The massive investment in the aforesaid activities would by itself generate a sizeable employment and income for the rural poor initially, provided the works are taken up

departmentally to the complete exclusion of contractors of any type (even the labour contractors). Contractors are well known for their sub-standard work, exploitation of labour (which implies employment with destitution) and low level of employment of technically trained persons. Therefore, their exclusion will bring about significant increase in the employment of technicians, engineers and other educated persons. Following the same logic the felling and clearing of forests should also be done departmentally by the Government. The present method of auctioning the coupe to the contractors for felling and clearing of forest should be done away with. Instead the logs or sawed timber should be auctioned. This has a tremendous potentiality of generating high level of employment and income in tribal belts of India. It has added advantage of aiding the conservation forests by preventing the wanton destruction of forests by the contractors engaged in felling and clearing the forests to-day. Canal digging and desilting operations, construction of flood protection embankments, afforestation (to strengthen the earthen embankment and to check the erosion of soil) and felling and clearing of forests are highly labour intensive activities. The increasing level of employment and income will be first step towards weakening of the semi-feudal production relations wherever it exists.

The other step in this context would require mass

organisations of all adults from the agriculture labour house-holds, one in each village. These should be made responsible for:

- (i) enforcement of the law relating to land ceiling on holding,
- (ii) enforcement of schemes to completely relieve the weaker sections of the population of the burden arising out of usury,
- (iii) management of all rural development programmes, development of small scale and cottage industries, development of fisheries, poultry development, dairy, bee-keeping among others,
- (iv) village water supply, minor irrigation, village housing scheme, land reclamation, soil conservation, earthworks, canal digging, construction of roads and other public building afforestation and tree planting, and
- (v) management of educational institution.

This will go a long way towards weakening of the semi-feudal production relations.

A statutory reservation of some sectors of production for highly labour intensive technique is also required. It should be done in a manner that it does not increase the price of wage-goods in the country and, therefore, does not adversely affect the poor. The poor will have the option to buy from the alternative mix of commodities than those reserved for labour intensive technique. The textile industry offers a very good example in the Indian context. The product of this industry has a widely dispersed

market and has no close substitute. It may be possible to enforce a regulation whereby the weaving of some popular variety of textile is reserved exclusively for the 'process of production not using power'. For example, the 'process of production using power' should be allowed to manufacture only monocoloured textiles. Processes such as the printing of textiles and the weaving of multicoloured textiles, would thus be exclusively reserved for the 'household and small producer sector not using power'. This would mean an increase in the relative prices of such textiles (in the absence of a subsidy). Even then, there is likely to be a sufficiently high demand for such varieties, because the rich in any case will buy it. It is even possible to visualise that in the initial phase the demand will be greater than the productions. As the demand will be dispersed all over the country, there will be a sufficiently high rate of earning for 'household and small producer sector not using power' resulting in a big push for the expansion of the sector.

Suitable policy measures associated with training programmes for weaving and hand-printing of textiles and marketing may result in the quick expansion of this sector all over the country. One can think of other kinds of such protection. In any case, the expansion of 'household and small producer sector not using power' will affect somewhat adversely the textile mill-sector. The proportion of population employed

in the 'process of production using power' may even decline but the proportion employed in textile production as a whole will increase very rapidly and the increase in employment and earning will be dispersed all over the country. The economic gains to the weaker-sections of the population will be considerable. As the mill produced monocoloured textiles will be available for low wage and low income earners, these varieties will constitute the basic good part of the wage-good mix. Moreover, since subsidy will not be the kingpin of such policy measures, there is little possibility of emergence of 'intermediaries' and 'parasitic elements' which has been the bane of the past quarter century of developmental planning. Similarly the production of leather-goods may also be reserved for 'process of production not using power'.

The combined effect of all these will be one of weakening of the semi-feudal production relations alongwith better water management leading to augmenting of land resources and high intensity of cropping pattern in Indian agriculture and thus, paving of the way for achieving full-employment and high level of income generation in less than ten years' time. It will also have a secondary impact in generating a very sizable employment of educated and technically trained persons. The strategy for "full-employment with growth" will require massive public sector investment in

building up the infrastructure for agricultural development. The sizable foreign exchange reserve and the existing buffer stock of food-grains will make our task quite easy. But even then it will imply that public sector investment in other than the above mentioned sectors will have to be drastically reduced. In some sectors it will have to be frozen at the present level, in some it will have to be reduced and yet in others it will have to be done away with completely. Priorities will have to be drawn afresh on the lines indicated above.

However, it is also evident that this or any other strategy for full-employment will not be acceptable to the dominant among the ruling classes the constituents of which continue to remain the same. On the other hand, big and midium land-owning classe's opposition to such a policy will now be more conscions and organised. There will never be blunt or crude pronouncements against any strategy of full-employment. Attempts will even be made to pay lip service to it. But the debate will be directed not to the main issues involved, but to the esoteric issues and an attempt will be made to tie them to the question of development in India. This is clearly reflected in the debates on economic policy within the Janata party itself. The issue can hardly be raised in an effective manner by the devided lef. However, the Janata party will be anxious to redeem

its pledge about employment. The easiest way to do it will be to have some sort of employment guarantee scheme on the lines similar to that adopted by the Maharashtra State Government. A person in need of employment will be required to go and get himself or herself registered to the nearest public authority meant for it. If the authority concerned is unable to provide him with a job after 15 days from the date of registration, the person will be entitled to an unemployment benefit of Rs. 1/- per day. Alternately the person may be employed by the authority at a subsistence wage which will be not more than Rs. 2/- per day. For a family of four (with two workers) even the per capita monthly income will be less than Rs. 30/-. Bulk of the rural poor will hardly be attracted towards it. The little that will come for it, will be employed on earthworks related to the construction of roads, embankments and canal digging and land leveling operations etc. in an ad-hoc basis. The semi-feudal bondage and the low-wage situation will continue to exist. Labour resources will remain highly underutilised. But still in a very narrow technical sense of the term, "full-employment" will be claimed to have been achieved. The destitution, however, will continue.

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FISCAL POLICY FOR EMPLOYMENT PROMOTION: A REPORT ON THE INDIAN CASE*

A. P. GUPTA

The purpose of this paper is to review and analyse recent trends in labour intensity in India and to explore the possible uses of fiscal policy in promoting higher levels of employment in the country.

The paper is divided into four sections. Section I attempts to give an idea of the magnitude of the employment problem India faces and takes a careful look at recent trends in labour intensity in the country. Sections II and III attempt to explore the role which fiscal policy can play in promoting a factor-mix and output-mix which is more compatible with fuller employment in India. The final section draws some conclusions.

II. MAGNITUDE OF THE EMPLOYMENT PROBLEM AND THE RECENT TRENDS IN LABOUR INTENSITY

India is plagued by large-scale unemployment. The figures are staggering: according to an estimate obtained by using the productivity approach, as many as 42.4 million people were unemployed in the rural sector alone in 1971.¹ The Planning Commission, Government of India, says that even if the birth rate were to decline along the lines postulated in the country's Fifth Five Year Plan (1974-1979), the total addition to the labour force over the period 1974-1986 will work out to nearly 65 million people, about three and a half times the number of people currently engaged in the organized sector outside agriculture. Such is the magnitude of the employment problem India faces.

One reason for the stubborn persistence of unemployment in India is the continuing decline in the labour-intensity of the country's economy.²

* This is a revised version of the paper presented by me at the XXXIth Congress of the International Institute of Public Finance held at the University of Nice on September 8-12, 1973. I have benefited from discussions with a number of participants at the Congress. I am particularly grateful to Mohammed A. Rahman Ali, Hugo Gonzalez Cano, Alain Foulon, Herbert Geyer, A. M. Huq, Heinz Joswig, Olavi Keskinäki, Jorge Macon, and S. G. Madiman for their helpful comments and suggestions. This paper draws upon a study prepared recently by the author within the general framework of the war Income Distribution and Employment Programme, International Labour Office, Geneva. For details of this study, see Anand P. Gupta, *Fiscal Policy for Employment Generation in India* (New Delhi: Tata McGraw-Hill Publishing Company Limited, 1977).

1. Amartya SEN, *Dimensions of unemployment in India*, Convocation Address, Indian Statistical Institute, Calcutta, December 21, 1973.

2. Other reasons for the stubborn persistence of unemployment on a large scale in India include: a) the high rate of population growth, b) the low rate of effective investment, and c) significant underutilization of existing production capacities.

Whatever data are available clearly suggest that growth in employment in India has lagged far behind growth in productive capital employed, in ex-factory value of output, and in value added by manufacture (see Table 1). What is even worse is that in certain parts of the economy (e.g. mining, wood products) while output and capital employed have gone up, employment has actually declined.

The decline in the rate of growth in employment has been due, at least partly, to the increasing capital-intensity of the Indian economy.¹ A recent study has found an almost continuous upward trend in the share of depreciation in the gross value added in the private corporate sector: the share went up from 9.5 per cent in 1950-1951/1954-1955 to 10.3 per cent in 1955-1956/1959-1960, 12.5 per cent in 1960-1961/1964-1965, 13.1 per cent in 1965-1966/1969-1970, and to 13.4 per cent in 1970-1971/1972-1973.² This is consistent with the rising trend in depreciation as percentage of GDP at factor cost: the percentage rose from 5.23 in 1960-1961 to 5.79 in 1963-1964, 6.52 in 1967-1968, and to 6.95 in 1972-1973.³

Available evidence suggests that public policy in India has played an important role in the growth of technologies which favour capital in the factor-mix: it has not only tolerated such technologies, but has even deliberately favoured their adoption through various means. Tax policy is a case in point. The tax system in India has provided and continues to provide a number of incentives to stimulate industrial development in the country.⁴ The use of tax incentives for the purpose of encouraging industrial development rests essentially on the premise that the conferral of tax benefits will induce domestic or foreign industrialists either to initiate activities which they would not otherwise undertake or to expand their activities in already existing enterprises. While development of certain industries is a desirable objective, what is questionable is the design of the tax incentives used to achieve this objective. A careful review of the relevant literature shows that these incentives have been designed in such a manner that generally they not only lack selectivity but the tax benefit associated with them varies in proportion to the amount of investment in a capital asset. When calculating this benefit, no consideration is given to the employment oppor-

1. It has been suggested that capital-intensive industrialization in itself is not necessarily inconsistent with the objective of employment promotion. It is rather the linkages in the form of patterns of final demand and the related choices of technology that finally determine the relationship between industrialization and employment. For a discussion along these lines, see K. N. RAJ, *Linkages in Industrialization*, paper prepared for the UN Committee for Development Planning, February 1, 1974, mimeographed.

2. The Economic Times Research Bureau, "Structural Pattern of Factorial Payments, I", *The Economic Times* (New Delhi), July 14, 1975.

3. These figures have been obtained by using the data in: Government of India, Ministry of Planning, Department of Statistics, Central Statistical Organization, *National Accounts Statistics 1960-61-1972-73* (Delhi: Controller of Publications, 1975), Tables 6 and 11.

4. For a discussion of these incentives, see Indian Investment Centre, *Taxes and Incentives* (New Delhi, 1974). Also see the author's *Tax Incentives in India* (Bombay: Vora & Co. Publishers Private Limited, 1971); Government of India, Ministry of Labour and Rehabilitation, Committee on Unemployment, *Report of the Working Group on Financial and Fiscal Measures* (Delhi: Controller of Publications, 1973); and Harish K. SINGHAL, "Taxing for Development: Incentives Affecting Foreign Investment in India", *Harvard International Law Journal*, Vol. 14, 1973, pp. 51-88.

TABLE 1: Trends in factory employment, productive capital employed, ex-factory value of output and value added by manufacture (1959 to 1970)

Year	Employment (millions)	Productive capital (million rupees)	Ex-factory value of output (million rupees)	Value added by manufacture (million rupees)
1	2	3	4	5
1959	2.87	17,374	26,914	7,590
1960	2.90	19,995	31,504	8,644
1961	3.05	23,742	36,933	9,879
1962	3.99	34,441	61,923	17,004
1963	3.98	76,811	72,478	18,817
1964	3.98	83,280	77,640	18,990
1965	3.97	90,061	86,368	20,673
1966	4.15	98,945	99,829	24,959
1967	4.26	111,058	113,994	26,782
Compound annual rate of increase (%):				
1959-1970	3.64	18.36	14.02	12.88
1959-1965	5.64	24.41	15.80	14.38
1965-1970	1.30	11.50	11.92	11.10

a) The data in columns 3, 4 and 5, being in money terms, cannot be compared as they stand with the data in column 2; but even if they were adjusted for the rise in the price level, the rate of growth of factory employment in recent years would still be found to have been much slower than that of productive capital employed, ex-factory value of output and value added by manufacture.

b) The years after 1970 have had to be omitted due to the non-availability of the required data.

c) One Indian rupee = us dollar 0.1134 (October 31, 1975).

Source: The data relate to the census sector (all industries) of the Annual Survey of Industries, which now covers all registered factories which employ 50 or more workers with the aid of power or 100 or more workers without the aid of power. The data are collected from the factories each year on a complete enumeration basis and are published by the Central Statistical Organization (Industrial Statistics Wing), Department of Statistics, Ministry of Planning, Government of India, Calcutta.

ties created or likely to be created. The incentives have operated (and continue to operate) in an environment in which interest rates at which finance has been made available to industry have been maintained at artificially low levels and in which interest has been allowed as an item of expense for tax purposes.¹ The implications of such a combination of policy factors for trends in labour-intensity are obvious: by reducing tax liability considerably and thereby improving the net (after-tax) profitability, or by reducing the capital cost of a project, such a combination of policy factors can only be expected to induce distortions which work in the direction of reducing labour-intensity. This is precisely what has happened in India.

1. Another feature of this environment has been that foreign exchange needed for meeting the import requirements has been made available at prices considerably lower than what it would have fetched if sold through competitive bidding.

TABLE 2: Tax incidence and labour intensity 1961-1962 to 1973-1974 (percentage)

Industry	1961- 1962	1962- 1963	1963- 1964	1964- 1965	1965- 1966	1966- 1967	1967- 1968	1968- 1969	1969- 1970	1970- 1971	1971- 1972	1972- 1973	1973- 1974
Coal mining	TI		39.0										
LI			34.6									28.7	30.7
Cotton textiles	TI											20.5	21.0
LI												24.0	28.2
Jute textiles	TI										29.5	25.4	28.1
LI											22.4		
Woollen textiles	TI							37.2		31.3			
LI								23.1		15.0			
Iron and steel	TI	24.6	20.8				29.5	31.6					31.3
LI	19.9	19.5	19.3				23.9	23.1				26.4	26.0
Aluminium	TI					16.9	29.0	23.6	4.6	9.1	13.7		
LI						11.3	12.0	12.2	10.9	10.5	10.9		
Other non-ferrous metals	TI							23.9	24.0	22.7			
LI								12.1	8.9	8.4			
Motor vehicles	TI					30.0	30.0	28.3					
LI						12.3	13.5	13.9					
Foundries and engineering workshops	TI					29.2			25.7	18.5			
LI						17.9			19.9	17.9			
Basic industrial chemicals	TI	41.3											
LI	11.4												
Cement	TI												
LI													
Paper and paper products	TI												
LI													
Electricity generation	TI	25.0											
LI	10.2												
and supply	TI												
LI													
Shipping	TI												
LI													
Average for all industries	TI	43.7	52.3										
LI	16.9	16.9	16.7	17.0	17.1	15.9	16.4	16.4	15.9	15.6	15.1	15.6	15.8

TI = Tax Incidence; LI = Labour Intensity.

Sources: Based on data in "Finances of Indian joint stock companies, 1965-1966", Reserve Bank of India Bulletin, December 1967, pp. 1530-1614; "Finances of medium and large public limited companies, 1970-1971", Reserve Bank of India Bulletin, September 1972, pp. 1425-1584; "Finances of medium and large public limited companies, 1972-1973", in *Studies on company finances* (issued as a supplement to the Reserve Bank of India Bulletin of October 1974), pp. 1-92; and "Finances of medium and large public limited companies, 1973-1974", Reserve Bank of India Bulletin, September 1975, pp. 710-834.

To illustrate, Table 2 presents data on tax incidence and labour-intensity separately for certain industries and for all industries combined. The data are based on the Reserve Bank of India's studies of the finances of selected non-government, non-financial public limited companies, each having a paid-up capital of Rupees 500,000 and above, and cover a period of thirteen years, 1961-1962 to 1973-1974. While the industry-wise data are confined only to those years in which tax incidence on an industry worked out to at least ten percentage points lower than the average tax incidence on all industries, the data for all industries represent the average tax incidence and average labour-intensity of all companies covered by these studies. Data for the years 1961-1962 to 1965-1966 relate to 1,333 companies, those for the years 1966-1967 to 1970-1971 to 1,501 companies and those for 1971-1972 to 1973-1974 to 1,650 companies. These companies have covered, in terms of paid-up capital, about 80 per cent of all the non-government, non-financial public limited companies in India.

Tax incidence has been defined as the percentage of tax provision to profits before tax. For the years 1961-1962 to 1970-1971, the percentage relates to all the companies covered in the Reserve Bank of India's studies referred to above,¹ but for the years 1971-1972 to 1973-1974 the percentage relates to profit-making companies only.

As regards labour-intensity, this has been defined as the percentage of wage cost to value of production. This may not sound like an ideal way of defining labour-intensity in a country like India in which the objective of employment policy is simply that of increasing the numbers employed. But limitations of data availability did not permit us to use a more satisfactory definition.

It may be noted that the Reserve Bank of India data on wage cost relate both to salary earners and wage earners and no break-down of the data is available to show the relative changes in the shares received by these two groups of income earners. But evidence available from other sources suggests that in a large number of cases salary earners have improved their position relative to wage earners. This, in other words, means that wages as a percentage of the total of wages and salaries have declined.²

A striking feature of the trends in tax incidence and labour-intensity is that while the average labour-intensity of the private corporate sector in India has declined, industries with labour-intensity lower than the average for all industries have enjoyed considerably larger relief in tax incidence than industries with labour-intensity higher than the average for all industries: total reduction in tax incidence of industries with lower-than-average labour-intensity (e.g. aluminium, cement, and electricity generation and supply) works out to 3.59 times³ the reduction in tax inci-

1. Measurement of tax incidence in terms of percentage of tax provision to profits before tax of all companies suffers from certain limitations. For a discussion of these limitations, see the author's "Burden of Taxation on Corporate Sector", *The Financial Express* (Bombay), July 21, 1973.

2. For details of this evidence, see Anand P. Gupta, "Inflation, income distribution and industrial relations in India", *International Labour Review*, Vol. 110, No. 2, August 1974, pp. 178-179.

3. Represents the ratio of total tax saving enjoyed by industries with lower than average labour intensity to that enjoyed by industries which have higher than average labour

dence relevant to industries with higher-than-average labour-intensity (e.g. coal mining, cotton textiles, and jute textiles).¹ Clearly, the way corporation tax policy has operated in India has tended to induce distortions favouring the employment of capital, with the result that the labour-intensity of industrial output has suffered a decline.² This can hardly be regarded as consistent with the objective of promoting employment in a country like India.

II. HOW FISCAL POLICY CAN INFLUENCE THE FACTOR-MIX IN FAVOUR OF LABOUR

Fiscal policy can be of significant help in creating conditions which coincide as much as possible with the factor ratio that a country is endowed with. In the context of a country such as India, which suffers from scarcity of capital and where the employment problem has assumed rather staggeringly large proportions, such conditions can be created by fiscal measures which are most favourable for the employment of unskilled and semi-skilled workers in large numbers and which are inimical to the employment of scarce resources like capital.

Two measures which we consider necessary for achieving this result are: *a)* withdrawal of all fiscal incentives related to the employment of capital, and *b)* disallowance of interest as expenditure for tax purposes. These measures, by raising the effective price of capital, should have the effect of influencing the factor-mix in favour of labour.

The above measures should be combined with a deliberate fiscal effort aimed at reordering investment and production priorities with a view to increasing the output of mass consumption goods. A policy measure which deserves consideration here is a substantial reduction in the incidence of corporation tax on industries producing specified mass consumption goods. If these goods are in adequate supply, prices can be expected to remain reasonably stable and, as a consequence, beneficial effects may be expected not only on employment but even on income distribution.³

An attempt should also be made to explore the possibility of reducing the incidence of excise duties and other indirect taxes on mass consumption goods. Whatever data are available suggest that the incidence of taxation on at least some of these goods has registered an almost persistent increase. This has tended to cause upward pressures on the cost of living for the working population, which in turn has exerted a perceptible influence on money wage levels. The net result has been a further distortion between

intensity. Tax saving equals the difference between average tax incidence on all industries and that on an industry.

1. As between companies in an industry, this means considerably larger tax benefit to the companies with a relatively high proportion of capital in their factor-mix.

2. This is consistent with a recent Government of India estimate according to which the share of workers' wages in the value added by manufacture fell from 38.5 to 33.7 per cent in the decade 1960-1970.

3. For some evidence on the relationship between *per capita* availability of selected goods of mass consumption and inequality in income distribution, see "Distribution of rural income", *Economic and Political Weekly*, Vol. X, No. 38, September 20, 1975, pp. 1493-1495.

the relative factor prices—a distortion which has favoured capital-intensive rather than labour-intensive production.¹ In view of these considerations, any reduction in the incidence of taxation on mass consumption goods should be of help in influencing the factor-mix in favour of labour.

Before we proceed further, let us make it clear that we are not opposed to the grant of fiscal incentives.² All that we are suggesting is that when considering such incentives, their employment implications should be carefully examined. One way to make sure that a fiscal incentive has no adverse effect on employment would be to make it neutral with respect to the employment of capital: if, for example, it is considered desirable to grant a tax holiday to industry A, the intended tax benefit can be defined in terms of a specified percentage of its profits before tax rather than (as is the case now) in terms of a specified percentage of the capital employed.

Some may be inclined to fear that the complete withdrawal of all fiscal incentives related to the employment of capital will almost bring the industrialization process in India to a stop. If one works out the implications of all that we are saying, he would find that while some industries will certainly benefit, a good number of them may find themselves sufficiently induced to take steps designed to reduce the proportion of capital in their factor-mix. We do not see any thing wrong with an outcome such as this in a country like India.

We can also think of some other fiscal measures for influencing the factor-mix in favour of labour. These include: *a)* tax relief related to the number of workers employed or to the wages bill, *b)* tax benefit varying directly with the ratio of wages to value of plant and machinery, and *c)* tax rebate related to the amount of tax payable in respect of income derived from a labour-oriented industrial unit newly set up after a specified date.³ The focus of these measures is on influencing the factor-mix in favour of labour by reducing the effective cost of wages to a firm. We see a lot of merit in these measures but feel that their implementation may present certain administrative problems which the tax authorities may find very difficult to handle.

III. HOW FISCAL POLICY CAN PROMOTE A MORE LABOUR-INTENSIVE OUTPUT-MIX

Fiscal measures can also be of help in promoting higher levels of employment through their impact on output-mix. This can be done by deliberately directing the existing income distribution towards the consumption of

1. It must be noted that fiscal factors represent only one set of factors which have induced distortions between the relative prices of labour and capital. Other factors which have induced such distortions include labour market imperfections arising from trade unionisation, minimum wage laws and concessional rates of interest.

2. Indeed, we feel that a case does exist for the grant of fiscal incentives designed to encourage the production of selected goods (e.g. fertilisers).

3. An incentive along these lines was recommended by the Direct Taxes Enquiry Committee, popularly known as the Wanchoo Committee. See Government of India, Ministry of Finance, *Direct Taxes Enquiry Committee—final report* (New Delhi, 1972), pp. 121-122.

relatively more labour-intensive products, and also by reducing inequality in the prevailing income distribution in such a manner that it ultimately favours the consumption of more labour-intensive output.

Fiscal measures which have been taken in India to influence output-mix in favour of labour-intensive products include grants of substantial excise duty concessions to products of small scale enterprises and reservation of as many as 221 items¹ for exclusive purchase from small scale industrial units.² Adequate data required for a meaningful evaluation of these measures are not available, but whatever information is available clearly indicates that not all the industries benefitting from them are labour-intensive: a careful look at the latest available data on summary results for the factory sector issued by the Government of India's Central Statistical Organization shows that in a number of industries (e.g. manufacture of dairy products, tobacco manufactures, manufacture of footwear, manufacture of watches and clocks, and manufacture of musical instruments) while the invested capital per worker in the small sector³ is significantly lower than that in the large sector,⁴ the invested capital per rupee of value added in the former works out to be higher than that in the latter. This suggests that while there is every need to promote the development of village and small scale industries using labour-intensive technique of production, adequate care must be taken to ensure that industries which are not suitable for the small scale sector do not receive any undue fiscal benefits. At the same time, industries which do not belong to the small scale sector but which are labour-intensive should be considered for eligibility for appropriate fiscal benefits.⁵

Another way in which fiscal policy can be used to promote a more labour-intensive output-mix within the framework of a prevailing pattern of income distribution is by using the instruments of taxes and subsidies for discouraging or, in some cases, even penalising the output of capital-intensive goods, and for encouraging the output of labour-intensive goods. The central and state governments in India have made use of these instruments but the results do not appear to have been very encouraging. A good part of the explanation for this lies in *a*) the difficulties experienced in identifying the areas suitable for fiscal intervention by these governments and *b*) the various leakages in the design of appropriate policy measures and in their implementation.

As regards promotion of a labour-intensive output-mix through

1. As of November 28, 1974.

2. Applies to government purchases only. Examples of items reserved for exclusive purchase from small-scale industrial units are: animal driven vehicles, bandage cloth, boot polish, cotton pillows, cycle tyres and tubes, electric call bells, hand gloves, glue, postal weighing scales, razors, safety matches (except for defence), shoe laces, steel racks and desks, umbrellas, and wooden chairs.

3. Consists of factories having a gross investment in plant and machinery of Rupees 750,000 or less, or employing 10 to 49 workers with the aid of power and 20 to 99 workers without the aid of power.

4. Consists of factories having a gross investment in plant and machinery of over Rupees 750,000 and employing: *a*) 50 or more workers with the aid of power, or *b*) 100 or more workers without the aid of power.

5. For a discussion of the factors which deserve to be looked into when an industry is so considered, see Alan PEACOCK and G. K. SHAW, *Fiscal policy and the employment problem in less developed countries* (Paris, Development Centre of the Organization for Economic Co-operation and Development, 1971), pp. 104-105.

reduction in income inequalities, this is a relatively new idea. A clear formulation of the idea is available in a 1970 report prepared by an international team of specialists organized by the International Labour Office. According to this report, income distribution affects the level of employment mainly through its effect on the pattern of consumption: as the marginal propensity to consume imported goods is higher among the rich than among the poor, a reduction in income inequalities releases additional foreign exchange for the capital goods and intermediate products needed to expand employment; as the basic goods demanded by the poor are precisely the goods which are (or can be) produced with techniques considerably more labour-intensive than those used in the production of the goods demanded by the rich, a given amount of income will generate more employment when spent in the purchase of wage goods than in the acquisition of consumer durables; and since the poorer classes spend a high proportion of their income on food, the bigger their share of total income the greater the demand for agricultural goods, and the greater the check on the pace of urbanization—a check which helps the full-employment strategy.¹

More recently, attempts have been made to develop models for providing suitable frameworks for testing the link between equality and employment empirically.² Results based on application of one such model to data for the Philippines have confirmed the existence of positive relationship between equality and employment: "... a drastic shift in the income distribution (from a Gini ratio of about 0.47 to a Gini ratio of about 0.25) would increase employment by about 10 per cent and GNP by about 7 per cent. It would slightly deteriorate the balance of payments and lower the rate of growth of employment and GNP by about half a per cent. All these estimates are rough, but indicate that [reduction of income inequality] could be a sound economic measure, even if we do not consider other, equality positive, social and political aspects [of reduced inequality]".³

As regards India, a study prepared by the present author shows that a fairly drastic redistribution of private consumption expenditures in favour of the poorer classes (from a Gini ratio of 0.32 to a Gini ratio of about 0.20 over a period of five years) would change the output-mix in India such that the average annual growth rate of employment would increase by at least 15 per cent.⁴ In more practical terms, this means that more than an additional 2.6 million gainful employment opportunities could be expected to be created through a reduction in inequality. Thus, assuming that an average household consists of five members, as many as 13 million additional people can be expected to benefit from reduced inequality. To this should be added the gains resulting from: *a*) decline in imports of goods and

1. International Labour Office, *Towards full employment. A programme for Colombia* (Geneva, 1970), pp. 145 and 147.

2. See, for example, Felix PAUKERT, Jiri SKOTKA and Jef MATON, *Redistribution of income, patterns of consumption and employment: a case study for the Philippines*, World Employment Programme Research, Income Distribution and Employment Programme Working Paper No. 3 (Geneva, International Labour Office), 1974.

3. *Ibid.*, pp. 39-40.

4. Anand P. GUPTA, *Solving India's employment problem: role of fiscal policy*, World Employment Programme Research, Income Distribution and Employment Programme Working Paper No. 28 (Geneva, International Labour Office), 1975, pp. 18-46.

services demanded by the rich, *b*) increase in exports as a result of decline in domestic consumption of certain products which have a steady demand in world markets, and *c*) reduction in the various foreign exchange leakages.

In our opinion, India has the capacity to realize the potential which exists for the expansion of employment opportunities through a reduction in inequality, but the extent to which it is really able to use this capacity will depend upon the measures which the authorities take: *a*) to mobilize the resources required for redistribution through direct taxes, and *b*) to effect the transfer of these resources to the poorer sections of the population.¹

Fiscal policy can be of significant help in both of these areas, but India's experience so far with this policy does not justify much hope. A recent study of the incidence of taxes collected by the central government shows that while the rich pay a considerably higher proportion of these taxes than the poor, the tax system cannot be credited with any noticeable degree of effectiveness in reducing inequality in the distribution of disposable incomes in the country.² This is due to the failure of direct taxes to mobilize a growing proportion of the incomes which have accrued to the rich.

As regards the incidence of public expenditures, the situation is no better: according to a recent estimate, the share of the poor works out to less than even one-sixth of the total benefits of expenditures made by the Government of India.^{3, 4} What is worse, the fiscal operations of the Government seem to have worked in the direction of making the poor poorer: for every rupee which the poor paid as tax in 1973-1974, they received only about 80 paise⁵ in return.⁶

All this suggests that far-reaching changes will be required in order to realize the potential which exists for the expansion of employment oppor-

1. The success of the equality-employment strategy in India will also depend on what the authorities do to ensure adequate output *within the country* of foodgrains and other items of essential consumption demanded by the people. Indeed, if the output of foodgrains and other items of essential consumption fails to keep pace with the increase in demand resulting from consumption redistribution in favour of the poorer sections of the population, the rate of growth in employment with redistribution may turn out to be smaller than that without redistribution.

2. Anand P. GUPTA, *The rich, the poor and the taxes they pay in India: a study of central government taxes and their impact on income distribution and patterns of consumption*, World Employment Programme Research, Income Distribution and Employment Programme Working Paper No. 12 (Geneva, ILO), 1975, pp. 31-50.

3. Anand P. GUPTA, *Fiscal Policy for Employment Generation in India* (New Delhi: Tata McGraw-Hill Publishing Company Limited, 1977), Chapter 4.

4. Although the expenditures of the Government of India form a significant proportion of the total public expenditures in India, the redistributive impact of public expenditures in a part of the country may be different from the impression that one may get from this statement. This may be due to differences in the functional composition of public expenditures other than Government of India expenditures, as also due to regional differences in the degree of success or failure in the implementation of various expenditure schemes.

5. 100 paise make one rupee.

6. This figure has been arrived at on the assumption that the incidence of corporation tax is not shifted, i.e. the tax is borne entirely by the owners of equity capital. If even a part of this tax is assumed to be shifted forward in the form of higher product prices, the benefit received by the poor for every rupee paid by them as tax will work out to be still smaller.

tunities through reduction in inequality. The thrust of these changes will have to be on shifting the incidence of taxation in favour of direct taxes, and on improving the design and implementation of various public expenditure schemes so that the poor may benefit from these schemes on the intended scale.

IV. CONCLUSION

The persistent decline in labour-intensity is one of the main factors responsible for the massive problem of unemployment in India. Available evidence shows that fiscal policy has not only tolerated the adoption of technologies which are inappropriate for the prevailing labour conditions but has even deliberately favoured their adoption through various means. The result has been an appreciable decline in the labour-intensity of output. This means that while measures designed to *a*) control population growth, *b*) increase the rate of effective investment, and *c*) achieve fuller utilization of existing production capacities, are essential for solving India's employment problem, a determined effort will also be required to reverse the present trend of declining labour-intensity.

We believe that a sustained improvement in India's employment situation is possible and that fiscal policy can play an important role in achieving higher levels of labour-intensity. But in order that fiscal policy can play its role in an effective manner, changes in two broad areas will be necessary.

First, it is necessary to evolve a whole new approach toward the tax treatment of capital. The tax system in India has been, and continues to be, biased in favour of the employment of capital. This bias, by causing distortions between the relative prices of capital and labour, has favoured a capital intensive factor-mix. In our opinion a situation of this kind should not be allowed to continue. Policy measures which can be expected to change this situation and favour a relatively labour-intensive factor-mix include: *a*) withdrawal of all fiscal incentives related to the employment of capital, *b*) disallowance of interest as expenditure for tax purposes, *c*) substantial reduction in the incidence of corporation tax on industries producing mass consumption goods, and *d*) reduction in the incidence of excise duty and other indirect taxes on these goods.¹

Second, a determined effort will also have to be made to create conditions which are more favourable for the consumption of labour-intensive output and which are inimical to the consumption of capital-intensive products. Fiscal policy can be of significant help in creating these conditions by directing the prevailing income distribution towards the consumption of

1. Examined carefully, it would appear that the effectiveness of these measures would depend to a considerable degree upon the extent to which such measures are complemented by other policy actions of the development authorities. This is true because the latter, in operating the devices influencing the relative prices of capital and labour, can determine how much of the potential improvement in labour intensity will actually be realized. For practical purposes, it is indeed significant that perverse behaviour of certain key variables can choke off the positive effect of the above measures on labour intensity, thus negating the best of one set of policy intentions.

labour-intensive products, and also by reducing inequalities in such manner that the resulting pattern of income distribution is conducive to the consumption of a more labour-intensive output-mix.

Résumé

Le chômage en Inde est un phénomène d'une ampleur massive. En utilisant l'approche de la productivité, on peut évaluer à 42,4 millions le nombre de chômeurs agriculteurs hindous en 1971.

Parmi les facteurs expliquant la persistance de ce chômage de masse en Inde, on trouve le très fort taux de croissance de la population, le bas taux d'investissement, la sous-utilisation des capacités de production existantes et la réduction de l'intensité du travail. L'auteur soutient que la politique fiscale peut jouer un rôle important dans la résolution des problèmes d'emplois qui se posent à son pays. Il s'attache particulièrement à montrer comment la politique fiscale peut être adaptée pour encourager une combinaison des facteurs plus favorables au travail; de même, il montre comment elle peut pousser à une production demandant davantage de travail en orientant délibérément la répartition existante des revenus vers la consommation de tel produit exigeant plus de main-d'œuvre, aussi bien que par la réduction des inégalités économiques dans la mesure où celle-ci favorise un changement des habitudes de consommation au bénéfice de produits exigeant davantage de travail.

L'auteur avance quatre propositions destinées à encourager une combinaison des facteurs plus favorable au travail :

- a) Retrait de toutes les incitations fiscales favorables à l'emploi de capital;
- b) Refus de considérer les dépenses d'intérêt comme dépenses déductibles pour le calcul du revenu imposable.
- c) Réduction sensible de l'incidence de l'impôt sur les sociétés en faveur des branches industrielles produisant des biens de consommation de masse.
- d) Réduction des droits spécifiques ou indirects frappant de tels biens.

L'auteur fournit aussi des évaluations empiriques qui montrent qu'une redistribution drastique des consommations privées en faveur des classes les plus pauvres (d'un ratio Gini de 0,32 à 0,20 en cinq ans) changerait le contenu de la production en Inde de telle manière que le taux annuel moyen de croissance de l'emploi connaîtrait une augmentation d'au moins 15 %.

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Agricultural Growth:
Performance, The Role of Institutional and
Infra-structural Factors, Impact and Prospects.

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AGRICULTURAL GROWTH: PERFORMANCE, THE ROLE OF
INSTITUTIONAL AND INFRASTRUCTURAL FACTORS,
IMPACT, AND PROSPECTS

Introduction

This paper has 5 sections. The first section gives figures on the performance during the past decade. It is shown that production of foodgrains has barely kept ahead of population growth rates. There has been tremendous geographical concentration of the major increase in agricultural productivity. Much of the concentration of very high growth rates in a few districts, together with negative rates of growth at the other extreme, has been attributed to infra-structural and institutional factors.

Section II describes the role that infrastructure and institutional factors have played in the introduction and extension of new technology in agriculture.

Section III looks at some recent evidence relating to the impact of the green revolution on prospects for further agricultural development.

Section IV presents some sobering findings about the impact of the new technology on the diversification of the rural and urban economy.

Section V draws the conclusions, and describes the nature and magnitude of the challenge posed to Indian economic policy makers today.

SECTION I : PERFORMANCE

1

The precarious balance between demand and supply of foodgrains at the all India level is upset not only by wide yearly fluctuations, but also regionally because of grossly unequal rates of growth in agricultural output as between one region and another. Over the period 1962-65 to 1970-73; 212 Districts showed positive growth rates of agricultural output, while 70 districts showed negative growth rates.

Table 1: Where Were Growth Rates High?
Where Were Growth Rates Low?

Growth Rate %	No. of Districts	Location
Above 4.5	48	12 Rajasthan, 11 Punjab, 8 Western U.P., 5 Haryana, 4 Karnataka, 4 Gujarat, 2 J & K, 2 Tamil Nadu.
1.5-4.5	102	28 U.P., 24 M.P., 12 West Bengal, 8 Rajasthan, 5 each, Bihar & Gujarat, 4 each, Assam, Karnataka, Kerala & Tamil Nadu; 2 each A.P., and Haryana.
0-1.5	62	12 M.P., 11 U.P., 5 each-Gujarat, T.N., Karnataka; 4 each - AP & Rajasthan, 3 each; Bihar, Kerala, Maharashtra, Assam, & Orissa; 1 West Bengal.
Negative	70	23 Maharashtra, 11 AP., 8 Orissa, 7 M.P., 7 Bihar, 6 Karnataka & Gujarat, 2 Rajasthan, 1 UP., 1 W. Bengal.

1. Average annual compound growth rates (average of 1962 to 65, to average of 1970-73) were, for foodgrains; 2.74%; for population 2.24%.

2. Source: J.N.Y.- P.C. Project on Foodgrains Growth: A District-Wise Study: directed by G.S. Bhalla & Y.K. Alagh. Mimeo 1977.

In fact, districts covering more than half the area of the country have agricultural growth rates below 1.5%; - well below the rate of population growth.

Table 2.

Wheat and Rice Growth Rates
(Annual Compound Rates)

	%	%
Output	1.32	10.50
Area	0.24	3.96
Productivity.	1.07	6.29

Source: GS Bhalla & YK Alagh

A major problem has been that nearly two thirds of the area under rice has had either a negative rate of growth of output, or one below the rate of population growth. In all, 116 rice growing districts fell in these two categories. By way of contrast, the vast majority of wheat growing areas enjoyed substantial positive rates of growth, although growth was negative in 21 Districts of the Wheat Region. (They are Maharashtra - 13; M.P.-5; Karnataka 2; and Rajasthan 1.) Geographically, the distribution of the districts showing exceptionally high growth rates are worth nothing. The 3.96 mn. tonnes increase in rice outputs is heavily concentrated in seven States. Two of them are not traditionally rice growing areas at all. They are, in order of their contribution in tonnes; T.N., W.B., Punjab, M.P., Assam, Karnataka, and Haryana. Similarly, 78 per cent of the total increase in wheat was recorded by four states: UP, Punjab, Haryana,

and Bihar. Much of this tremendous geographical concentration of major increases in agricultural output, and at the other extreme, the incidence of negative rates of growth in others has been attributed to infrastructural and institutional factors.

SECTION II: INSTITUTIONAL AND INFRASTRUCTURAL BARRIERS TO THE INTRODUCTION AND EXTENSION OF THE NEW TECHNOLOGY

Most of the explanation for the regional concentration of growth in agricultural production can be grouped under 3 heads:

(1) infrastructure, (2) the acreage structure of land holdings, and (3) institutional factors.¹ But since the acreage structure phenomenon has been traced largely to institutional factors, it properly belongs with the "institutional factors" and will be so treated here.

1. Infrastructure

Irrigation, electricity, roads, expanded storage facilities:- of these the single most important prerequisite for the introduction of new technology is irrigation.

The requirement of a controlled water supply applies both to HYV wheat and to HYV rice. But in the traditional rice growing areas, lack of drainage is as much of a problem as lack of irrigation facilities. As the development of public water management projects has never been considered on a par with canal irrigation as an important infrastructural factor, this will be considered, where in practice it appears today to be long - under 'institutional problems'.

1. While it is quite true that the High Yielding Varieties of Wheat developed were better suited to Indian conditions than the HYV seeds of rice were for the traditional rice growing areas, this statement does not help much. We have to plan now in terms of the HYV seeds we have got, and not the ones we should like.

On the importance of extending irrigation infrastructure, it has been said: "if the dry districts of Rajasthan, Gujarat, Madhya Pradesh, and Maharashtra could be provided with irrigation, there is absolutely no doubt that the green Revolution can engulf much of this area which has so far been left completely behind in the race." ¹⁾

Electricity:

While the number of electrified villages increased fourfold between 1931 and 1973, still, by the end of 1973-4, electricity was available in only one quarter of India's villages. Tubewell irrigation depends on electricity, and tubewells have been a key factor in the adoption of new technology in areas like Punjab, which by the end of the 1960s irrigated nearly 70 per cent of its net area, sown, as compared to 20 per cent for the country as a whole.

Market roads, storage facilities, regulated 'mandis', and a network of credit and extension institutions were rapidly developed before, and concurrently with, the advent of the new technology, most notably again, in Punjab.

These were to infrastructural preconditions for the introduction of the Green Revolution where it did take place. These remain the infrastructural preconditions for its extension to new areas.

1) G.S. Bhalla and Y.K. Alagh opuscit page 95

But all this involves heavy public investment, not only in the infrastructure projects themselves, but also in industries producing intermediate goods for dam building, tubewell production, electricity distribution, road construction, and storage facilities. Public investment in agricultural growth does not imply a reduction in industrial investment, but an increase in it.

2. Institutional Factors

Farm size, unequal access to credit facilities, tenurial systems, and unrestricted property rights in land still stand in way of increasing production and investment in improved technology.

Farm Size

Initially, every where, the adoption of HYV seeds began with the bigger farmers, and subsequently extended to smaller ones. In the prime green revolution areas, average holding size not only was, but still is, much ^{larger} than in the rest of country. Moreover, even today in the main wheat growing areas, a higher proportion of the bigger farmers have adopted the new technology than have smaller farmers. Why?

Given that (1) the average operational holding is getting smaller and smaller in India, and that (2) in the remaining non-green revolution areas, typically farm-size is much less than it is in the areas which have already adopted the new technology, given these facts, it is becoming more important, not less, to offset the disadvantages that small farmers face.

What are their problems?

Typically, small farmers are poor farmers. They lack storage capacity and are commonly under pressure from creditors. Consequently they often sell immediately at low prices right after the harvest, to middle men who store their grain, get credit for holding it, and sell at a higher price later on. As long as this goes on, the small farmer risks making less money from a bigger harvest, after spending more money on inputs. His problems are often worse in a bumper crop year, when local post-harvest prices generally fall.

Because he has less access to credit, he pays more for it, and for the supply of modern inputs. He is more subject to the risk of being wiped out by a poor monsoon, or a too generous one. Because of the lower profitability, per household of small-firm operations, he is much more dependent on credit and much less able to self-finance his short and long term investments.

Most of these problems are in fact, not farm size problems per se at all, but rather institutional or infra-structural problems.

The 'easier' solutions are well known:

- (1) expanded public storage facilities,
- (2) direct purchase of crops at support prices,
- (3) elimination of middlemen and speculative hoarding,
- (4) better access to institutional credit, and
- (5) crop insurance.

The more difficult ones may be crucial. They are (1) redistribution of land in favour of small farmers, and (2) a reversal of the downward shift of households in the acreage structure.

The latter can only be accomplished if a large proportion of rural people find productive jobs outside agriculture altogether. That is, it depends on massive investment in industry, construction, and certain type of services.

Despite these serious barriers to their adoption of the new technology, small farmers manage to get higher yields per acre, and crop more intensively than bigger farmers. This makes it even more important to see that small farmers also are enabled to reap the output advantages of a shift to HYV technology. It appears that they can make better use of it than bigger farmers do.

This means that the logic of land reforms aimed at redistributing land in their favour still stands, on output productivity grounds.

Evidence that big farmers use land with less intensity than smaller ones has been presented by Ranjit Sau in his paper "Political Economy of Land Utilization".¹

1. Paper presented at the Seminar on "Political Economy of Agriculture", Patna, November 1976 (Mimeo).

TABLE-3: Cropping Intensity in India

Farm Size in ascending order ⁽²⁾	U.P.- 1966-67	Punjab 1967-8	Orissa 1967-8	Maharashtra 1967-68	T.N.- 1968-69	Assam 1968-69	Rajasthan Adopters ⁽³⁾	Non-Adopters.
1.	140	151	148	119	170	134	172	132
2.	137	143	133	112	165	130	133	124
3.	144	138	128	110	172	123	125	102
4.	136	120	129	107	167	118		
5.	122	-	110	106	153	111		

- 1) Cropping intensity - GCA
NCA
- 2) Class-intervals used vary from state to state.
- 3) Adopters use HYV seeds; Non-adopters do not.

It is also known that in some areas big farmers do not use available irrigation facilities beyond one season.

TABLE -4: Inter-season use of irrigation water, size-groups of Farms in the Kosi Canal Area, Bihar.

Kharif irrigation size groups (acres)	Rabi/Kharif Irrigation (percent)
0 - 2	102.43
2 - 5	66.38
5 - 10	57.11
10 - 20	54.29
Over 20	36.50

Source: P.H. Prasad, "Limits to Investment Planning" in Ashok Mitra(ed) Economic Theory and Planning. Oxford University Press, 1974.

The reason is that the big farmer has a multiplicity of channels for earning a profit ⁽¹⁾. He allocates his time and effort so as to maximize his profits from a set of two or more channels. On this criterion the cultivation of land merits attention for only one season. In the other season he concentrates his attention on food grains trading, bringing industrial goods from town to village market, or money lending. It is the criterion of relative profitability which induces him to leave land idle during one crop season.

Ranjit Sau suggests that in areas where this takes place, legislation could be passed to make it mandatory for the big farmers to lease out their 'off-season' fallow land, to landless households, or to marginal farmers. Credit for inputs would have to be provided institutionally to these seasonal tenants.

Another explanation may be that if the addition to income of the second crop is less than the cost of the additional labour required, the big farmer operating with hired labour may not find the second crop profitable. Smaller farmers using mainly family labour do not face this constraint.

Amit Bhaduri ⁽²⁾ links the relative profitability of money lending in certain high tenancy areas of West Bengal to the landowners' failure to invest in the new technology. He

(1) The NCAR All India Household Survey Vol. III indicates that bigger farmers derive a substantial amount of income from trade and similar activities.

(2) Amit Bhaduri: "A Study in Agricultural Backwardness under Semi-Feudalism" Economic Journal March 1973, Vol. 83.

argues that the semi feudal landlords who derive income both from leasing out land to sharecroppers and from moneylending, may find his combined income from leasing out and lending reduced if he invests in improved technology. So long as his gain in income from increased productivity is less than his loss in income from usury (due to a reduction in the level of consumption loans required by the share croppers), he is better off not investing.

However the trade off between investment and moneylending income may favour moneylending in some areas even where owner cultivation is the rule - areas such as Hissar in Haryana, which is rightly considered a part of the green Revolution region. There, owner cultivators in the 9 to 15 acre range lend out so much money that a significant proportion of them earn more from usury than from cultivation. As you move south to drier areas, the acreage class of the set of cultivating money lenders rises. As you move north, to even more prosperous areas, money lending by bigger farmers is merely a minor sideline, which does not interfere with investment or with multiple cropping. Moreover, within the "money lending belt" in Haryana, the typical small farmer crops intensively and uses canal irrigation. The really big farmers use both canal and tubewell irrigation. But this middling acreage set use canal irrigation for one crop only, and sows a non-irrigated less remunerative crop for the second season of the crop year. In contrast, in the richer region to the north it is precisely this 9 to 15 acre set which invests the most

per acre, and lends out least.

It appears that money lending becomes a main income source among self cultivators who are big enough to earn a surplus which could either be invested or lent out, but too small to find costly investment in deep tubewells,¹⁾ threshers and the like, more profitable than moneylending.

Finally, it may be noted that before canal irrigation came to this region, it was not the cultivating land owners who were the money lenders, it was the traders. That is, moneylending on a large scale by cultivators is a new phenomenon in Haryana, found most in regions characterized by partial penetration of the new technology, and not in regions where HYV crops are generally grown in both seasons. Extension of canal irrigation to fresh areas is likely to reproduce this phenomenon, especially if effective credit facilities do not keep pace with the extension of irrigation, as happened in much of Haryana.²⁾

Thus while the institutional barriers to investment and intensive cultivation are undoubtedly greater in sharecropping, and in non-Green Revolution areas, they not only also exist in the parts of Green Revolution areas where the new technology arrived more recently, but money lending as an important alternative income source seems to have increased along with the extension of canal irrigation.

1) It costs roughly twice as much to sink a tubewell in this relatively low ground water area than it does in the region to the north.

2) Institutional credit reaches a much smaller proportion of small farmers in Haryana than in Punjab.

However, by far the most important obstacle to the introduction of productivity raising technology appears to have been, and still is, tenurial systems. A glance at the tables of section I reveals that the productivity gains have been greater in the Ryotiwari areas, especially Punjab, Haryana, and Western U.P. This is now a region of peasant proprietors, dominated by middle caste cultivators. Zamindar type tenure dominated in Bengal, Bihar and Eastern U.P. Under it actual cultivators were tenants of non-cultivating landlords, who often lived outside the village and generally belonged to upper castes. The system was characterised by a series of intermediaries system was officially wiped out, but heavy vestiges of semi feudal land relations remain.

In some areas, including the prosperous regions of Haryana, and parts of Tamil Nadu, there are reports of absentee landlordism coming back again. Generally also it is found that tenancy legislation, aimed at controlling rents, or conferring security of tenure has not been effectively implemented.

Wherever a large part of cultivation was (or is) undertaken by tenants who felt insecure, who were (or are) unable to make use of institutional credit available to owners of land, there is little incentive to go in for double cropping, to undertake the risks of investment even when money is available, or to use modern inputs which raise costs in the face of uncertain monsoons.¹⁾ It appears that in some rice areas, the continued

1) See Page 13, Biplab Dasgupta, Agrarian Change and the New Technology in India.
U.N. Research Institute for Social Development, Geneva 1976.

prevalence of share cropping at high rents makes the use of costly inputs uneconomic to the tenant, even though the present output price is quite remunerative to the owner operator. Except in UP, West Bengal, and to some extent in Rajasthan, one reaction to tenancy laws was resumption of land which deprived tenants of land altogether. Further, the laws encouraged resort to non-registered, oral tenancy agreements, whose existence could be denied by landowners. The result, in terms of reported pure tenancy in India is given below. We have recent evidence that the impact of the new technology was to worsen this situation in many regions.¹⁾

Table 5: Changes in Pure Tenancy and "Entirely Owned" Holdings in India.

	<u>1953-54</u>	<u>1960-61</u>
Per cent of Pure Tenants	17 %	4.2 %
Per cent of "Entirely Owned" Holdings.	60 %	71.6 %

(Source: Biplay Das Gupta, opus cit, page 27.

1) See for example: Sheila Bhalla, "Changes in Acreage and Tenure Structure of Land Holdings in Haryana, 1962-72". Economic & Political Weekly, Vol. XII, No. 13, Review of Agriculture, 26 March, 1977; and Kathleen Gough, "The Green Revolution in South India & North Vietnam", Mimeo 1977.

The traditional rice growing areas seem to face very special institutional problems, given three characteristics of the existing High Yielding rice varieties. These varieties are too short stemmed to stand heavy flood conditions; they often mature so early that harvesting is done while it is still raining; and they are susceptible to attacks by insects and diseases which thrive in wet conditions. In some areas, such as Madhya Pradesh, rice fields are submerged at the start of the season, but may suffer water scarcity in the period of flowering and grain formation.

The major problem which emerges is water management. This means both irrigation and drainage. G. Patnaik and R. Seetharaman¹ have described the sequence of difficulties typical of the low-growth parts of the traditional rice growing areas.

During the Kharif season, the dominant water management problem in traditional rice growing areas is drainage of flooded fields. If the farmer drains his field properly, he is not sure of getting a fresh supply of water later on in the season. There are no local storage tanks. Moreover it may be impossible for him to drain his own fields. If his neighbours' fields are also flooded, where is he to drain his surplus water to?

1) G Patnaik and R. Seetharaman "Technological Aspects of Increasing Rice Production in India" ICSSR Workshop on Paddy, mimeo 1977.

In Rabi, where water is available, a common practice is to let water flow from field to field. This has several consequences: (1) water is wasted; (2) 'tail end' fields get inadequate water, or get it too late; (3) if fertiliser has been used, there is a loss of nutrients from one field to another, jeopardising the interests of individual farmers; and finally (4) over irrigation of some fields.

They say: "It is therefore essential to develop an efficient field distribution of irrigation water through field channels laid out on the basis of contour survey of the command area of a given distributory ...". "cheap and efficient water distribution devices like spillways, diversion boxes, check-gates ... could be installed." "The field channels could be lined.....". "These simple structures could be prepared in the village itself". "This however, needs community endeavour in the entire command area."¹

Irrigation and drainage works of this kind would seem to fulfill all the criteria for permanently productivity raising, labour intensive, employment creating, public works programmes. The reason it has not been done is, in two words, "property rights". This is the nub of a real institutional barrier faced in many traditional rice growing areas (and elsewhere).

1. Page 14, G. Patnaik and R. Seetharaman, opus cit (emphasis mine).

Refusal to participate in a drainage scheme, by even a small subset of those owning land in the area to be covered, renders the entire project useless or impossible. If the obstructions created by unrestricted rights of private ownerships are to be removed within the framework of continued private land ownership, then legislation has to be introduced to make it as impossible to prevent the construction of drainage works, as it is impossible to prevent the construction of roads today.

It is not only potential drainage schemes which have been nullified in this way. The case of lift irrigation scheme, is reported from Kerala, where landowners who had pumpsets with surplus capacity, sold pumpset water to small farmers with adjacent plots. In one such project such landowners actively obstructed construction work in progress, causing it to be abandoned, despite its government backing. The works in this scheme which were completed, created permanent additional employment and income via double or triple cropping in places where only single or double cropping was practiced previously. Similar incidents involving obstruction by landowners adjacent to canals, where irrigation channels must cross their fields, are reported by small farmers even in Haryana.

1. See Poverty, Unemployment and Development Policy, Vol. I Report, Centre for Development Studies, Trivandrum, March 1975.

It is high time that public policy should treat drainage and similar projects as an essential part of agricultural infrastructure, on a par with major irrigation projects and highway construction in the eyes of laws relating to the amendment of property rights in the public interest.

In short, the major institutional problems of land distribution, tenancy, unrestricted property rights in land, are still very much with us, and still stand in the way of increasing agricultural production, rural employment, and a minimum subsistence for the small farmer.

SECTION III: IMPACT OF THE GREEN REVOLUTION ON PROSPECTS FOR FURTHER AGRICULTURAL GROWTH

The green revolution may have influenced the prospects for future agricultural growth through at least three of its reported consequences.

First, the distribution of operated land has shifted in favour of big farmers in both HYV wheat areas and in HYV rice areas. Secondly, asset distribution has moved obviously in favour of big farmers, and big farmers are investing a higher proportion of their surplus in farm business assets than are smaller ones. Finally, in the very high productivity districts of Punjab and Haryana, the green revolution has greatly accelerated the subdivision of family farms. There, this is the dominant cause of the dramatic downward shift in the acreage structure of operated holdings during the decade.

The consequences of these changes are future agricultural development may be far - reaching. Let us look at some evidence related to the second point first.

Not only do big farmers invest much more in total, but a much higher proportion of their investment is in farm business assets.

TABLE -: Mean value per Household of Annual Investment by Haryana cultivators: 1969-70.

Description		Operated acreage class				
		5 or less	5-10	10-20	20-30	Above 30
1. Farm I	Rs. %	303 (52)	760 (55)	918 (51)	1579 (61)	3150 (67)
2. Non-Farm I	Rs. %	286 (48)	617 (45)	887 (49)	994 (39)	1556 (33)
3. Total I	Rs. %	589 (100)	1337 (100)	1805 (100)	2573 (100)	4706 (100)

Source: G.S. Bhalla, Changing Structure of Agriculture in Haryana, 1969-70, issued by HESO, Govt. of Haryana, 1972.

Note: Figures in brackets are percent of total investment.

This means that, in time, there are bound to be greater potential gains in productivity on bigger farms. It could reverse the present pattern of maximum output per acre on smaller farms which dwindles to lower productivity as acreage operated rises. But if despite the enhanced earning capacity generated by their ownership of the largest share of productive assets, big farmers continue to farm less intensively than small ones, the end result may be simply a mal-distribution of both land and farm assets, from the stand point of output maximization, and not a reversal of the inverse relation between farm size and

per acre output.

The third point, the rapid subdivision of operational holdings, suggests a different, and I think, more probable outcome, given the acreage class pattern of investment.

It appears that the green revolution has greatly reduced the number of bigger farmers, and almost quadrupled the number below five acres.¹⁾

Table 7: Haryana Cultivating Households by operated Acreage class, 1961 and 1971.

Acreage Class	Percent 1961	Percent 1971
0 - 5	16.14	45.59
5 - 10	25.84	22.63
10 - 15	22.24	12.49
15 and above	35.26	19.28

¹⁾ The mechanism whereby this happened was this. Adoption of the new technology in the mid-sixties substantially raised income per acre. This removed an economic constraint previously binding the joint family together. They could survive nicely separately, and they fissioned into several nuclear families. The typical subdividing family broke up its land into three separate operational holdings.

Given the absolute reduction in the numbers above 10 acres, and the dramatic increase in the numbers below 5 acres, the investment problem for the future lies not in the big farmers' propensity to invest more, but in the small farmers' incapacity to invest much. In general, a growing population dependent on a fixed land area, plus the pre-eminence of the farm household decision in the disposition of the economic surplus, if any, leads to very pessimistic conclusions. Haryana's experience shows that there is no guarantee that a green revolution will generate internal forces sufficient to sustain even an enhanced rate of economic growth via private investment within agriculture. Failing appropriate public intervention, the enhanced economic surplus gets "locked up" on the very farms where it is generated. As farms shift towards the bottom of the acreage class structure, first the surplus gets diverted to consumption and non-farm investment, and ultimately, as the next table shows, there is no surplus at all.

The lesson is, that contrary to the optimistic assumptions of many, the green revolution itself generates forces inimical to its own continued forward motion.

Table 8: Savings and Investment in Haryana, by acreage class.

Description	Operated Acreage Class				
	5 or less	5-10	10-20	20-30	Above 30
1. Savings	- 738	+ 30	1422	3973	3908
2. Total Investment	589	760	918	1579	3150

(Source: G.S. Bhalla 1972 opus cit, pages 15 and 58)

The observation that the inequality of land holdings has increased takes on a different colour in this context - where it has grown precisely because so many households have dropped into the very lowest acreage classes. If, as has been suggested for some of the areas adopting new HYV rice cultivation¹⁾, the cause of the rising gini coefficient is different, the consequences will also be different. If the concentration in land ownerships rises because the same number (or a larger number) of big farmers acquire even larger holdings than before, it may be very good for investment indeed, however bad it may be for those reduced in circumstances, by sale or by transfer

¹⁾ See Kathleen Gough, The Green Revolution in South India and North Vietnam, Mimeo, 1977

of operated holdings to big landlords via eviction of tenants.

Thus the consequences of increasing concentration of land and of assets depend very heavily on what changes the increasing gini coefficient is reflecting. The prospects for future agriculture growth are dim indeed if the Haryana pattern predominates. If on the contrary, the experience of south-west Thanjavur is widely repeated, the prospects for increasing output further are bright, although its impact on employment, and the number below the poverty line may be dismal.

SECTION IV : IMPACT OF THE GREEN REVOLUTION ON DIVERSIFICATION OF THE RURAL AND TOTAL ECONOMY.

Do the most successful 'new technology' areas of the country support the view that rising farm incomes will (a) stimulate the diversification of the occupational structure, and (b) produce a proportionate shift of population out of agriculture ? Does it produce a rise in tertiary sector employment significantly greater than that experienced in slower growing agricultural regions ?

On the basis of available evidence for each of Punjab and Harayana, the answers to all these questions is: No.

In Punjab, in place of occupational diversification, the reverse process has taken place. Both a larger absolute number of workers are now in agriculture, as well as a higher proportion of the total labour force.

While the growth rate in the Punjab primary sector has been three times that in the rest of India, the accompanying growth rate in the tertiary sector has been insignificantly above that for the rest of India.

In Punjab in 1961, "55.58 percent of the total population was engaged in agriculture, and agriculture contributed 47.75 percent to total state incomes." In 1971, the proportion of workers had increased to 62.67

percent but the share of agricultural income had marginally declined to 45.33 percent.¹⁾ This is why, despite the fact that total agricultural income rose by 63 percent under the impact of the new technology, the per male worker income in agriculture only modestly increase from Rs. 1007 to Rs. 1309 per year.

Meanwhile, the proportion of workers engaged in manufacturing has significantly fallen from 15.3% to 11.3%, and the proportion of workers in the tertiary sector has gone down from 25 to 23%, although in both sectors per male workers income has risen.

Thus rapid economic growth based on the most successful green revolution in the country, has led to de-industrialization, an increase in the proportion of workers in agriculture, and a substantial widening of the income differences between agricultural and non-agricultural employees.

With a larger proportion, as well as a larger number, of workers trapped in agriculture, it is not surprising that there has been in Punjab a three-fold multiplication in the number of small farm holdings and a doubling of the number of landless labourers.

¹⁾ G.S. Bhalla: "Punjab Economy, Growth and Prospects", Mimeo 1976, page 13.

We have to conclude that the growth of agricultural output alone does not stimulate more rapid development in the secondary and tertiary sector sufficiently. There is no alternative in India to direct measures for increasing productive, employment creating investment outside of agriculture, and on a large scale.

Findings from Haryana support this view. The only region in that state where substantial occupational diversification among landless agriculture labour household has taken place is the large area adjacent to Delhi. It is poor in terms of farm labour earnings, but rich in terms of supplementary income from dairying among landless households, and even richer in terms of the non-agricultural wage labour earnings afforded. The main additional conclusion in the Haryana case is that occupational diversification is so effective in putting a 'floor' under landless household incomes, that even in relatively low average total income areas, there is less grave poverty among the landless than in the region with the highest average farm labour and total earnings in the state, which is occupationally much less diversified.

Table 9 : Sen's 'P' Measure¹⁾ for per capita income in landless agricultural labour households.

Item	The diversified lower agricultural income region.	The less diversified prime Green Revolution area of the State.
1.Sen's 'P' measure	.321	.433
2.Per capita income 1972-73	Rs. 370	Rs. 432

1) A higher value for 'P' indicates a greater incidence of dire poverty.

On an all India basis, the combined impact of the general failure of the Indian economy to diversify, plus inter-state differences in agricultural growth rates, can be judged by reference to Table 40, which shows in constant (1970-73) prices, the changes in productivity per hectare, the number of male agricultural workers, and productivity per male agricultural worker, for each state.

Source: G.S. Bhalla and Y.K. Alagh, 1977 opus cit.

State	Productivity per Hectare (Rs./Hect) 1962-5	Productivity per Hectare (Rs./Hect) 1970-73	Number of Male Agricultural Workers 1962-5	Number of Male Agricultural Workers 1970-73	Productivity per Male Agrl. Worker (Rs/Worker) 1962-5	Productivity per Male Agrl. Worker (Rs/Worker) 1970-73
1. Andhra Pradesh	1070	1093	7,109,000	8,338,332	1920	1674
2. Assam	1154	1227	2,129,300	2,619,292	1370	1350
3. Bihar	923	978	9,500,300	12,165,023	1063	861
4. Gujarat	774	937	3,496,300	4,421,231	2216	2091
5. Haryana	809	1150	1,391,700	1,662,186	2649	3504
6. Himachal Pradesh	745	931	643,400	628,494	958	1353
7. Jammu and Kashmir	747	1135	439,300	872,868	1458	1135
8. Karnataka	705	940	4,636,300	5,317,058	1645	1925
9. Kerala	1616	1775	1,421,300	2,235,086	2815	2349
10. Madhya Pradesh	648	695	7,330,000	8,765,176	1667	1656
11. Maharashtra	617	494	6,857,400	7,845,466	1727	1656
12. Orissa	1106	1026	3,990,100	4,766,955	2033	1445
13. Punjab	1152	1761	1,789,200	2,439,633	3217	4170
14. Rajasthan	384	518	4,435,300	5,106,793	1297	1677
15. Tamil Nadu	1469	1770	5,675,000	6,844,158	1860	1950
16. Uttar Pradesh	930	1079	16,337,700	18,736,158	1260	1328
17. West Bengal	1336	1442	5,338,300	6,702,699	1647	1539

Table -10

Changes in Productivity per Hectare and Productivity per Agricultural Workers 1962-65 and 1970-73

SECTION V : CONCLUSIONS AND POLICY IMPLICATIONS

There are reasons now to think that it may be more difficult to maintain the 'food balance'¹⁾ in future, than it was to achieve it in the recent past.

One reason is that in the districts where it was easiest to introduce it, improved technology has already been adopted. To sustain past growth rates, we have to extend the new technology to more difficult districts, and to more 'difficult' sets of farmers within the 'easy' districts. In many of the slow-growing wheat production areas, the required investment in infrastructure will be given greater²⁾ than was necessary to develop the wheat areas which experienced rapid growth during the 1960's.

1) It should be noted that there are good reasons for objecting to the prevalent use of the phrase 'food balance' to refer to a food production growth rate only marginally in excess of the population growth rate. It brushes aside the existence of 30 to 50 per cent of our population below the poverty line. It is analagous to planning for a rate of growth of jobs equal to the rate of population. We do not ignore the backlog of unemployed in calculating the required supply of jobs. Why do we ignore the backlog of the unfed when we calculate the required rate of growth in food supply ?

2) It has been estimated that the costs of irrigation alone in the central 'dry belt' of India are in the range of Rs. 12,000 to Rs. 15,000 per hectare.

One gains the impression that the implications in terms of additional financial resource mobilization may not have been fully appreciated even by well informed politicians eager to invest in agricultural growth.

In the slow (or negative) growth rate, traditional rice areas, the barriers to growth appear to be more complex. While investment is certainly necessary, it is not likely to be sufficient. On the one hand it is thought that the additional investment required for an equivalent gain in productivity may be less than in the poor-performance wheat areas. On the other hand, the effort needed to break the institutional barriers to growth is likely to have to be very much greater.

Investment and institutional change in agriculture will, however, not be enough to give productive employment to people now dependent on agriculture for a living, let alone to take care of population growth in rural and urban areas. Even the highest rates of growth recorded anywhere in India have not succeeded in inducing a proportionate shift to working population to jobs outside agriculture. The result has been that everywhere productivity per man has grown more slowly than productivity per acre. The income differentials between agricultural and other workers have also widened.

To prevent population from 'piling up' in agricultural occupations, and its consequences - the steady reduction of holding size and the gradual disappearance of prospects for private investment in agriculture - there is no alternative to a very substantial increase in the rate of investment in non-agricultural production. The magnitude of the effort needed, in terms of investment in agriculture, investment in industry, and in institutional transformation, poses the major challenge to Indian economic policy makers today.

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Spatial Pattern of Levels and Growth
of Agricultural Output In India

By

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SPATIAL PATTERN OF LEVELS AND GROWTH OF
AGRICULTURAL OUTPUT IN INDIA

INTRODUCTION

The sixties saw a major change in Indian agriculture in some parts of the country. The use of new seeds coupled with scientific inputs such as chemical fertilisers, insecticides and pesticides commonly called the green revolution resulted in substantial increases in output in the agricultural sector in general and in wheat in particular in some parts of the country. The pre-conditions for the adoption of new technology, the impact of green revolution on income distribution, the political implications of rapidly increasing power of a small set of cultivators in the green revolution region etc. have all been very widely discussed in India.

During the heyday of green revolution, there was an air of optimism and many economists genuinely believed that India had finally solved for ever its problem of agricultural shortages with which it had been afflicted for a very long time. Some over enthusiasts even talked glibly about the emergence of excessive food surpluses and even appearance of ghost villages.

The seventies saw the pendulum swing to the other

extreme. During the early seventies, monsoon failed in some parts and there was a drought for two consecutive years in Maharashtra and some other areas in India. This resulted in a perceptible decline in the total agricultural output. Furthermore, the rate of growth of output in the green revolution areas also started flattening out.

It also became clear that in spite of the green revolution, the rate of growth of agricultural output had tended to decline during the sixties as compared with the fifties. Dr. Hanumantha Rao calculated, on the basis of a trend line, that agricultural output had grown at an annual rate of 3.3 per cent during the fifties and only at 2.1 per cent during the sixties. Furthermore, it was discovered that whereas area increases made a significant contribution to total output increases during the fifties, it was the productivity increase which was the main component of growth during the sixties.¹

The perceptible fall in the growth rate of agricultural output in the early seventies led many economists including the Economic Survey to talk about stagnation in Indian agriculture. The stagnation theory has been very vehemently

1. Increase in area and yield are to some extent complementary. However, it is generally easier to expand area than to increase yield. Furthermore, it is much more expensive to expand yield than to expand area. Consequently, the marginal cost of additional agricultural output is increasing at a high rate and in that sense, the increasing population pressure has forced a major proportion of investment to be concentrated in agriculture alone. This makes it more difficult for the Indian economy to come out of the low level equilibrium trap.

controverted by another group of economists.

The main purpose of this paper is to undertake a detailed examination of the performance of Indian agriculture at a disaggregated district level. The aim is to study the spatial pattern of productivity levels and growth rates of total agricultural output in India from 1962-65 to 1970-73. These periods have been selected with a view to capture the effect of green revolution on Indian agriculture. The analysis is based on three years average of districtwise data on area and output of 19 crops for the period 1962-63, 1963-64, 1964-65 during the sixties and 1970-71, 1971-72, 1972-73 during the seventies. It is expected that the three years average would tend to avoid the effects of seasonal fluctuations so characteristic of Indian agriculture. The 19 crops that have been included in this study are:

Cereals: Rice, Wheat, Jowar, Bajra

Pulses: Maize, Ragi, Barley, Gram, Tur, Groundnut

Oilseeds: Rapeseed and Mustard, Sesamum, Linseed,

Other crops: Sugarcane, Cotton, Jute, Mesta, Tobacco

We have obtained the total value of agricultural output during both the sixties and the seventies by valuing the 19 crops included in our study at constant average all India 1970-75 prices. These prices were obtained by first adding the all India value of output of each crop at current prices

TABLE 1

ALL CROPS

LEVELS AND GROWTH OF AVERAGE AREA, OUTPUT AND PRODUCTIVITY
FOR THE TRIENNIALS 1962-65 AND 1970-73

S.No.	STATE	AVERAGE FOR 1962-63, 1963-64, 1964-65			AVERAGE FOR 1970-71, 1971-72, 1972-73			% ANN. COMP. GROWTH RATE 1970-73 OVER 1962-65		
		AREA (HECT.)	OUTPUT (000 Rs.)	YIELD (Rs./HECT.)	AREA (HECT.)	OUTPUT (000 Rs.)	YIELD (Rs./HECT.)	AREA	OUTPUT	YIELD
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	9702235 (7.88)	10476163 (9.89)	1070	953428 (7.50)	10426712 (8.43)	1093	-0.32	-0.06	0.27
2.	ASSAM	2108291 (1.70)	2434407 (2.30)	1154	2424069 (1.91)	2275819 (2.41)	1227	1.76	2.54	0.77
3.	BHAR	8635717 (6.96)	7974118 (7.53)	923	8507837 (6.70)	8322977 (6.73)	978	-0.19	0.54	0.73
4.	GUJARAT	8198993 (6.85)	6584783 (6.22)	774	8194006 (6.45)	7684018 (6.22)	937	-0.46	1.95	2.42
5.	HARYANA	3982349 (3.21)	3223442 (3.04)	809	4376066 (3.44)	5033629 (4.07)	1150	1.19	5.73	4.49
6.	HIMACHAL PRADESH	749543 (0.60)	558935 (0.53)	745	769395 (0.60)	716536 (0.58)	931	0.33	3.15	2.83
7.	JAMMU & KASHMIR	739609 (0.60)	553004 (0.52)	747	757044 (0.60)	859927 (0.70)	1135	0.29	5.67	5.37
8.	KARNATAKA	6692142 (7.01)	6128690 (5.79)	705	7687789 (6.05)	7227628 (5.85)	940	-1.53	2.08	3.66
9.	KERALA	863532 (0.70)	1395702 (1.32)	1616	922451 (0.73)	1637775 (1.32)	1775	0.83	2.02	1.18
10.	MADHIA PRADESH	14798275 (11.92)	9592177 (9.06)	648	15403105 (12.12)	10713866 (8.67)	695	0.50	1.39	0.88

for 1970-71, 1971-72 and 1972-73 and dividing this aggregate value by the sum of physical output for that crop for these very years. Value of output figures were obtained from National Accounts Statistics - Disaggregated Tables 1960-61 - 1972-73 while physical output data was taken from estimates of area and production of principal crops, Ministry of Agriculture. Our area and output figures for each crop pertain to these 19 crops only and differ from the estimates given by the Ministry due to lesser coverage as explained in detail earlier. According to our data (Table 1), total agricultural output had a value of Rs. 1,23,625 mn. during the seventies compared with a value of Rs. 1,05,890 mn. during the sixties. This means that total agricultural output grew at a compound rate of 1.95 per cent during the period under study. Area under the 19 crops increased from 124 mn. hectares to 127 mn. hectares, that is, at a compound rate of .30 per cent. Productivity increased at a much faster rate of 1.66 per cent from Rs. 853 per hectares to Rs. 973 per hectare.

In value terms, total output increased by Rs. 17,735 mn. with an area increase of 2.94 mn. hectares during 1962-65 to 1970-73. Except for Orissa, Maharashtra and Andhra Pradesh, agricultural output has registered an increase in every other state of India. The major contribution to the increase in output was made by the states of Uttar Pradesh,

Contd....

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1	2	3	4	5	6	7	8	9	10	11
11.	MAHARASHTRA	15721619 (12.66)	9700549 (9.16)	617	14411688 (11.34)	7132644 (5.77)	424	-1.08	-3.77	-2.74
12.	ORISSA	4915333 (3.96)	5439031 (5.14)	1106	5177116 (4.07)	5310863 (4.30)	1026	0.05	-0.30	-0.93
13.	PUNJAB	3962960 (3.19)	4563531 (4.31)	1152	4763732 (3.75)	8381606 (6.79)	1761	2.33	7.91	5.45
14.	RAJASTHAN	10929339 (8.08)	4200446 (3.97)	384	12069529 (9.50)	6253743 (5.06)	513	1.45	5.10	3.81
15.	TAMIL NADU	5750426 (4.63)	8451617 (7.36)	1469	5804775 (4.57)	1027045 (8.31)	1770	0.32	2.47	2.36
16.	UTTAR PRADESH	13334612 (11.77)	17053241 (15.19)	930	19919036 (15.68)	21508173 (17.40)	1079	1.04	2.90	2.67
17.	WEST BENGAL	5656181 (4.56)	7561247 (7.14)	1336	6346780 (4.77)	9156004 (7.41)	1442	1.45	2.42	0.96
	ALL INDIA	124128312 (100.00)	105890483 (100.00)	853	127867846 (107.00)	123625138 (100.00)	973	0.29	1.95	1.66

-:6:-

Punjab, Haryana, Tamil Nadu and West Bengal where the value of output increased by Rs. 4,455 mn., Rs. 3,825 mn., Rs. 1,810 mn., Rs. 1,825 mn., and Rs. 1,595 mn. respectively. It may be noted that almost half the increase is accounted for by the two states of Uttar Pradesh and Punjab alone. On the other hand, output declined perceptibly (by Rs. 2,568 mn.) in the state of Maharashtra and to some extent in Orissa and Andhra Pradesh.

In general, in all the states where agricultural output has registered a positive growth, output increases are associated with increases in both area and productivity. The only exceptions are the states of Karnataka, Gujarat and Bihar. Significantly, despite sharp decrease in area, output has actually increased in Karnataka due to a marked increase in productivity from Rs. 705 per hectare to Rs. 940 per hectare. In Gujarat and Bihar also despite a decline in area, output has registered an increase due to productivity increases.

A mixed picture obtains in the states where agricultural output has declined. In Maharashtra, both area and productivity have shown a sharp decline with the result that output has registered a big fall. In Andhra Pradesh, area has declined but productivity has actually increased with the result that the fall in output is not very great.

Orissa is the only state where in spite of a substantial increase in area, the total agricultural output has actually recorded a decline because of a

The statewide data on productivity shows that except in Maharashtra and Orissa, output per hectare has risen in every other state of India. The maximum increase in output per hectare has been registered by Punjab followed by Jammu and Kashmire, Haryana, Rajasthan and Karnataka. In other states, there has been only a marginal increase in productivity.

Important cropping pattern changes also seem to have occurred during this period (see Table 2). Foodgrains output as a whole has registered a substantial increase from 76.2 mn. tonnes to 94.6 mn. tonnes. Within the foodgrains category, the greatest increase has taken place in wheat which has increased by 13.4 mn. tonnes. However, the increase in other cereal crops has been rather small and in fact there has been a decline in the production of jowar. In general, cereals have shown fairly high growth over the period under study. As against this, the pulses have shown a decline both in area as well as in output. Area under pulses declined by 1.6 mn. hectares and output by 2 lakh tonnes. Oil seeds have shown a stagnating trend. Sugarcane output has increased from 10.7 mn. tonnes to 12.3 mn. tonnes. There has been a marginal decline in the output of fibre crops, although the

ALL INDIA MASTER TABLE OF ALL CROPS
LEVELS AND GROWTH OF AVERAGE AREA, OUTPUT AND PRODUCTIVITY FOR
THE TRIENNIALS 1962-65 AND 1970-75

S. NO.	CROP	AVERAGE FOR 1962-63, 1963-64, 1964-65			AVERAGE FOR 1970-71, 1971-72, 1972-73			% ANN. COMP. GROWTH RATE 1970-73 OVER 1962-65	
		AREA (HCT)	OUTPUT (TONNES)	YIELD (KG/HCT)	AREA (HCT)	OUTPUT (TONNES)	YIELD (KG/HCT)	AREA	OUTPUT
1.	RICE	35333513	35866513	1015	36023360	39826616	1106	0.24	1.32
2.	WHEAT	13452231	10912343	811	16357672	24264243	1322	3.96	10.50
3.	JOHAR	18264898	9537646	522	16319062	7396160	453	-1.39	-3.12
4.	BAJRA	11207869	4120045	365	12127853	5729520	472	0.90	4.21
5.	MAIZE	4601467	4580804	996	5695969	6179615	1085	2.70	3.81
6.	RAJG	2522751	2026387	803	2373263	2052519	865	-0.75	0.16
7.	BANDED	2620510	2325327	824	2402417	2542278	1033	-1.57	1.23
8.	CHHALLS	36283239	69370565	786	93879606	89013151	943	0.70	3.02
9.	GRAM	9121625	5194121	569	7589314	4091671	545	-2.26	-0.74
10.	FOUR	2309392	1614358	643	2409855	1715671	712	-0.49	-0.77
11.	PULSES	11531217	6808479	585	9999169	6605113	661	-1.87	-0.38
12.	FOODGRAINS	99914456	76179044	762	103378775	94620694	915	0.43	2.75
13.	GROUNDNUT	7182156	5457044	760	7122029	5227265	734	-0.10	-0.53
14.	RAPESEED & MUSTARD	1350585	564296	418	1530285	775612	507	1.57	4.06
15.	SESAMUM	1819826	240573	187	1796324	379939	212	-0.15	1.38
16.	LINSSEED	1331923	301996	227	1194746	311071	260	-1.34	0.37
17.	CASHEEED	470581	105413	224	421887	440199	332	-1.35	3.63
18.	OIL SEEDS	12155071	6769292	557	12065271	6834086	566	-0.09	0.12
19.	SUGARCANE	2352853	10734985	4563	2481319	12340636	4973	0.67	1.76
20.	COTTON*	8089878	5349334	119	7677742	5186302	129	-0.64	0.32
21.	JUTE*	835911	5748036	1237	741750	5054990	1227	-1.48	-1.59
22.	NETA*	374956	1566226	751	291573	1113133	687	-3.09	-4.17
23.	TOBACCO	412130	348254	845	434312	370004	852	0.65	0.76

*Output in terms of bales of 160 kgs.

output of cotton has shown a small increase.

With the exception of jowar, there has been increase in productivity in every cereal crop. A phenomenal increase in productivity has taken place in wheat where output has risen from 811 kg./hectare to 1322 kg./hectare. The productivity of rice has also shown an increase from 1015 kg./hectare to 1106 kg./hectare. The productivity increases in other cereals have been much smaller.

Coming to the oilseeds, there has been a small decline in productivity of the area under groundnut. In all the other oilseeds crops, productivity has tended to increase although marginally. Sugarcane has shown a substantial increase in productivity. In cotton, there has been increase from 119 kg./hectare to 129 kg./hectare¹. There has been a marginal decline in the productivity of jute as well as mesta and a small increase in the productivity of tobacco.

Taking all the 19 crops together, the average productivity of agriculture has increased from Rs. 853 per hectare in 1962-65 to Rs. 973 per hectare during 1970-73, that is at a compound rate of 1.66 per cent per annum.

1. New varieties of cotton have made a visible impact recently and the cotton output increased from 5.49 mn. bales during 1970-73 to 7.1 mn. bales in 1974-75 and is likely to stabilise at this record level during 1975-76. Economic Survey, 1975-76, Government of India.

However, the average productivity hides the fact that there have been very large spatial variation both in the level and the growth of agricultural output. This, we shall explain more fully now.

LEVELS OF AGRICULTURAL OUTPUT

To study the problem of spatial variations in productivity and use of modern inputs we have prepared a descending order table of 282 districts according to their value productivity per hectare. The 9 hill district units had to be neglected as input data for these were not very satisfactory.

The results are presented in Table 3(a) and 3(b) where the 282 districts have been consolidated into 9 productivity classes.

The average productivity of all agricultural crops in India comes to Rs. 974 per hectare only. 133 out of the 282 districts had above average productivity. They account for 44.55 per cent of the cultivated area in India and 63.78 per cent of the total national agricultural output. They consume 70.42 per cent of the total fertiliser consumption and employ 71.52 per cent of the total tractors, 54.86 per cent of the total irrigation engines and account for 68.41 per cent of the total gross irrigated area in India.

-:12:-

Table 3(b)

SPATIAL DISTRIBUTION OF THE INPUTS USING DISTRICTS BY 70s YIELD LEVELS

70s yield Levels (Rs./Hect.)	Andhra Pradesh	Assam	Bihar	Gujarat	Haryana	Jammu&Kashmir	Karnataka	Kerala	Madhya Pradesh	Maharashtra	Orissa	Punjab	Rajasthan	Tamil Nadu	Uttar Pradesh	West Bengal	Total
Above 1900	2	-	-	-	-	-	3	1	-	1	-	3	-	4	2	1	17
1500-1900	2	-	-	1	1	1	2	6	-	2	-	6	-	5	3	4	33
1300-1500	1	3	-	1	1	-	3	-	-	1	-	1	-	-	1	7	19
1100-1300	2	2	5	2	1	-	3	-	-	1	2	1	-	1	9	2	31
900-1100	-	2	4	5	3	-	3	-	3	-	6	-	1	1	21	-	49
700-900	5	-	5	5	-	1	2	-	11	1	3	-	7	-	10	-	50
500-700	2	-	1	4	1	-	1	-	27	5	-	-	6	-	2	-	49
300-500	3	-	-	-	-	-	2	-	2	12	-	-	5	-	-	-	24
Less than 300	-	-	-	-	-	-	-	-	-	3	-	-	7	-	-	-	10
Total 282 districts	17	7	15	18	7	2	19	7	43	26	11	11	26	11	48	14	282
Region above average (Average 974)	7	7	8	5	4	1	14	7	2	5	6	11	-	11	31	14	133

-:11:-

TABLE 3(a)

Percentage Distribution of Total Agricultural Output and Inputs for the trienniums 1970-73: 70s Yield Levels

70s Yield Levels (Rs./Hectare)	Area	Output	Fertilisers	Tractors	Irrigation Pumpsets	Gross Irrigate Area
Above 1900	4.77	10.65	14.74	17.44	15.66	12.56
1500-1900	9.70	17.18	24.19	29.37	25.02	21.52
1300-1500	6.01	8.57	5.31	3.58	4.79	4.35
1100-1300	11.52	14.06	15.19	14.47	11.47	15.22
900-1100	14.81	19.40	15.47	14.51	11.67	21.54
700-900	17.44	14.46	12.27	9.27	12.38	12.97
500-700	15.70	9.88	6.61	7.24	10.57	7.60
300-500	11.21	4.72	5.23	2.70	6.94	3.54
Less than 300	4.83	1.08	0.99	1.42	1.50	0.71
Total 282 districts	100.00	100.00	100.00	100.00	100.00	100.00
Region above average (Average 974)	44.55	63.78	70.42	71.52	64.86	68.41

That there is a large concentration of output in the high productivity districts and that simultaneously these are the very districts which make use of major proportion of modern inputs is clearly brought out by the Table.

We have made a nine category classification of districts according to their yield levels. We may call all the districts which have productivity level above Rs. 1,300 per hectare as high productivity districts, those which have productivity levels between Rs. 700 to Rs. 1,300 per hectare as mid productivity districts and those with productivity less than Rs. 700 per hectare as low productivity districts.

There are 69 districts whose productivity is greater than Rs. 1,300 per hectare. These account for 20.48 per cent of total cultivated area and 36.40 per cent of total national output. They consume 44.24 per cent of fertilisers, use 50.39 per cent of the tractors and 45.47 per cent of the irrigation engines and account for 38.43 per cent of total gross irrigated area in India. The high productivity districts could be further dis-aggregated into two broad groups. 50 districts (that is nearly 18 per cent) have a productivity level exceeding Rs. 1,500 per hectare. They account for only 14.48 per cent of the total gross cultivated area in India but contribute as much as 27.84 per cent of the total output in the country. They consume 38.98 per cent of the total fertilisers used in India, employ

46.81 per cent of all the tractors, 40.68 per cent of all the irrigation engines and account for 34.08 per cent of total gross area irrigated in India.

These 50 high yielding and high input using districts are distributed as follows:

Nine of these belong each to Punjab (out of 11 districts in Punjab) and Tamil Nadu (out of 11 districts in Tamil Nadu), 7 to Kerala (out of 7 districts in Kerala), 5 each to Karnataka, western Uttar Pradesh and West Bengal, 4 to Andhra Pradesh, 3 to coastal Maharashtra and one each to Haryana, Gujarat and Jammu and Kashmir. The availability of assured irrigation in these districts had enabled them to profitably use more fertilisers and other modern inputs and to obtain a very high yield level.

The other sub-groups in the high yielding districts consists of 19 districts that have productivity ranging between Rs. 1,300 to Rs. 1,500 per hectare. It is significant to note that even though they (the 19 districts) have recorded a much higher yield level compared with the all India average (Rs. 1,388 per hectare compared with Rs. 974 per hectare), their use of modern inputs is far below the average. Thus, with 6.01 per cent of total area and 8.57 per cent of total national output, they use only 5.31 per cent of fertilisers, employ only 3.58 per cent of

tractors, 4.79 per cent of pump sets and tubewells and claim only 4.35 per cent of total irrigated area in India. A further disaggregation of this group shows that one subset comprising of seven districts, of which three districts belong to Karnataka and one each to Haryana, Punjab, Uttar Pradesh and Andhra Pradesh do not strictly fall in the category of low input using districts. However, the second subset consisting of the rest of the districts which are mainly concentrated in West Bengal (7) and Assam (3) have very low irrigation and use very small amounts of fertilisers or tractors. It may be noted that in their case the high productivity is mainly due to high land fertility and high rainfall.

At the other extreme, are 83 districts (29 per cent) whose productivity is less than Rs. 700 kg./hectare. It is significant to note that although they account for 31.74 per cent of the total area but they produce only 15.68 per cent of the total output. Relative to the area under cultivation, their use of modern inputs is very much smaller. Thus, with 31.74 per cent area they consume only 12.83 per cent of the total fertilisers, employ 11.36 per cent of the tractors and 19.01 per cent of the tubewells and irrigation engines and account for only 11.85 per cent of the total area irrigated in India. The low productivity 83 districts are mainly distributed in the dry parts of central and

southern India. 29 of these belong to Madhya Pradesh, 20 to Maharashtra, 18 to Rajasthan, 5 to Andhra Pradesh, 4 to Gujarat, 3 to Karnataka, 2 to Uttar Pradesh and one each to Bihar and Haryana.

A look at the Table shows that within the low productivity districts, the contribution of 35 districts within this category that have productivity less than Rs. 500 is relatively much smaller and their consumption of modern inputs is almost insignificant.

In addition to the high and low productivity districts, there is a very large chunk of 130 mid productivity districts whose output per hectare varies between Rs. 700 to Rs. 1300. They account for nearly half (47.77 per cent) of the total cultivated area and contribute nearly half the total output in India. These mid productivity districts consume 42.93 per cent of total fertilisers, employ only 38.25 per cent of the total tractors and 35.52 per cent of irrigation engines and account for as much as 49.73 per cent of total irrigated area. It is rather strange that with a much higher irrigation, the use of inputs like fertilisers, tractors, etc. is relatively much smaller in these districts. Consequently, the productivity recorded is also near the all India average productivity.

A further aggregation of the mid productivity districts

shows that 31 of these had a productivity ranging between Rs. 1100 to Rs. 1300 per hectare, 49 in between Rs. 900 to Rs. 1100 and 50 in between Rs. 700 to Rs. 900 per hectare. The 31 districts in the first group have relatively higher output per hectare and also use relatively higher inputs. On the other hand, the 50 districts with productivity ranging between Rs. 700 to Rs. 900 have relatively much lower productivity and also their use of inputs is less than average.

The 83 mid productivity districts are located in Uttar Pradesh (40), Bihar (14), Madhya Pradesh (14), Orissa (11), Karnataka (8), Gujarat (12), Rajasthan (8), Andhra Pradesh (7), Assam (4), Maharashtra (2), Tamil Nadu (2), West Bengal (2), Haryana (4), Punjab (1) and Jammu & Kashmir (1).

That a major concentration of modern inputs has taken place is clearly brought out by the fact that with slightly greater than one fifth of the area, the top productivity 69 districts consume almost the same proportion of fertilisers as 130 mid productivity districts with nearly 50 per cent of the area. In fact, there is more disparity in terms of use of tractors and tubewells. The various constraints to development in this large mass of mid productivity districts have to be looked into carefully if Indian agriculture is to make a breakthrough.

GROWTH OF AGRICULTURAL OUTPUT

Table 4(a) and 4(b) give an overview of the growth of agricultural output in India. All the 282 districts in the country were arranged in descending order of growth rates of agricultural output and a consolidated table containing nine classes was prepared. The average rate of growth over the period 1962-65 to 1970-75 works out to be 1.94 per cent per annum. 212 districts show positive growth rates and there are as many as 70 districts where growth rate is negative. For the sake of analysis, we have clubbed the 9 growth rate categories into four broad categories. We have called all the districts that have a growth rate of greater than 4.5 per cent as high growth districts. Only 48 districts fall in this category. The 102 districts which have recorded a growth rate varying between 1.5 to 4.5 per cent have been designated as medium growth districts and 62 districts with growth rate varying between 0 to 1.5 per cent as slow growing districts. The 70 districts that have recorded negative growth rates have been dealt with separately.

That rapid growth and disproportionately large input consumption is concentrated in a small part of India is clear from the fact that only 17 per cent of the districts have shown a growth rate higher than 4.5 per cent per annum. These districts account for 18.68 per cent of the area and

Table 4 (b)

SPIAL DISTRIBUTION OF THE INPUT USING DISTRICTS BY GROWTH OF OUTPUT

Output Growth (Comp. Ann. %)																			
		RAJASTHAN	PUNJAB	HARYANA	KARNATAKA	UTTAR PRADESH	JAMMU & KASHMIR	GUJARAT	TAMIL NADU	ASSAM	MADHYA PRADESH	WEST BENGAL	BIHAR	KERALA	ANDHRA PRADESH	MAHARASHTRA	ORISSA	TOTAL	
Above 7.5	4	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	
6.0. to 7.5	4	3	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	12	
4.5 to 6.0	4	1	3	2	2	6	2	4	2	1	1	1	1	1	1	1	1	23	
3.0 to 4.5	2	1	2	2	2	10	1	2	2	1	6	4	2	1	1	1	1	34	
1.5 to 3.0	6	1	1	2	2	18	1	3	2	3	10	8	3	3	2	1	1	68	
0.0 to 1.5	4	1	1	1	5	11	1	5	5	3	12	1	3	3	4	3	3	62	
-1.5 to 0.0	1	1	1	1	5	1	1	2	1	1	5	1	4	1	6	5	8	37	
-3.0 to -1.5	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	3	1	11	
Less than -3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	15	1	22	
Total 282 districts	26	11	7	19	48	2	18	11	7	43	14	15	7	17	26	11	282		
Region above average																			
(Average 1.94)	18	11	7	7	29	2	7	5	3	20	11	4	3	1	1	1	128		

Percentage of Input for the Agricultural Sector of the Economy

TABLE 4 (a)

Output Growth (Comp. Ann. %)	Area	Output	Fertilisers	Tractors	Irrigation Pumps	Gross Irrigated Area
above 7.5	5.30	7.01	10.44	23.79	9.85	11.56
6.0 to 7.5	5.13	5.44	5.95	13.58	3.96	7.70
4.5 to 6.0	6.17	10.59	10.50	17.09	11.69	13.30
3.0 to 4.5	10.91	13.07	12.10	13.27	9.18	12.97
1.5 to 3.0	22.56	23.47	19.54	10.65	15.18	19.96
0.0 to 1.5	21.07	21.77	24.09	12.42	31.00	18.59
-1.5 to 0.0	12.97	11.61	8.74	4.79	6.43	10.48
-3.0 to -1.5	4.66	3.11	2.32	1.79	3.90	2.06
Less than -3.0	9.15	3.99	6.32	2.63	8.82	3.37
Total 282 districts	100.00	100.00	100.00	100.00	100.00	100.00
Region above average	55.47	22.83	87.15	15.91	47.47	59.53
(Average 1.94)	1	1	1	1	1	1

23.04 per cent of the total output in India. They consume 26.89 per cent of the total fertilisers used in India, employ 54.46 per cent of the total tractors and 25.50 per cent of the pump sets used in India and account for 32.56 per cent of the total irrigated area in the country.

The 48 high growth districts are located in Punjab, Haryana, Western Uttar Pradesh and in some dry parts of Rajasthan and Karnataka. 12 of these belong to Rajasthan, 11 to Punjab (all the 11 districts), 8 to western Uttar Pradesh, 5 to Haryana, 4 to Karnataka, 4 to Gujarat and 2 each to Jammu & Kashmir and Tamil Nadu. The high growth 48 districts can be further disaggregated into two parts. 25 of these have recorded growth rates higher than 6 per cent per annum and 23 between 4.5 to 6 per cent. It is notable that out of the 25 districts that have recorded an average growth rate of output of 7.82 per cent, quite a few belong to the dry arid zone of north-western India where productivity level was very low - in fact it was lower than the all India average productivity during 1962-65. They have recorded a very high increase in their productivity levels - from 721 kg./hectare during the sixties to 1138 kg./hectare during the seventies (i.e. at a compound rate of 5.87 per cent). These are mainly the former dry districts of Rajasthan (8), Haryana (2), western Uttar Pradesh (2) and Karnataka (2) where irrigation and particularly tubewell

irrigation has made a big headway. In addition, they include all the 11 districts of Punjab where the percentage of gross area irrigated has jumped up from 57.7 per cent during 1962-65 to 76.1 per cent during 1970-73. In addition to these 25 districts, there are 23 districts that have recorded a high growth rate ranging between 4.5 to 6 per cent per annum. Their spatial distribution is given in the Table.

At the other extreme, there are as many as 70 districts that have actually shown negative rates of growth. In fact, 22 of these had a rate of growth below - 3 per cent. A major reason for their deceleration is the fact that they have proportionately much lower irrigated area and they make use of relatively insignificant proportions of modern inputs. Thus, with 26.78 per cent of the area, these 70 districts produce only 18.71 per cent of the total all India output. They account for only 15.91 per cent of the total irrigated area in India, consume only 17.38 per cent of the total fertilisers, employ only 9.21 per cent of the total tractors and 19.15 per cent of the pump sets used in the country. The 70 negative growth districts are mainly concentrated in the dry central zone and some other parts of central India. As many as 23 of these are located in Maharashtra, 11 in Andhra Pradesh, 8 in Orissa, 7 in Madhya Pradesh, 7 in Bihar, 6 in Karnataka, 4 in Gujarat, 2 in Rajasthan and one each in Uttar Pradesh and West Bengal.

These are the real problem districts in India that have mostly stagnated over the years.

In addition, there are 62 slow growing districts having growth rates ranging between 0 to 1.5 per cent per annum. These districts have shown only a small increase in productivity. The 62 slow growing districts account for about one fifth of the area and output produced in India. They use 24.09 per cent of the fertilisers consumed, employed 12.42 per cent of tractors and 31.00 per cent of pump sets and account for 18.59 per cent of the total irrigated area. By using relatively average amount of inputs, they are able to produce average output. However, it is not very clear why this large area has shown a negligible rate of growth.

12 of these 62 districts belong to Madhya Pradesh, 11 to Uttar Pradesh, 5 each to Gujarat, Tamil Nadu and Karnataka, 4 each to Andhra Pradesh and Rajasthan, 3 each to Bihar, Kerala, Maharashtra, Assam and Orissa and one to West Bengal.

In addition to these high growth and decelerating districts, there is a very large number of medium growing districts in India. Thus, there were as many as 102 districts that have recorded a growth rate varying between 1.5 to 4.5 per cent. These districts account for nearly one third (33.47 per cent) of the total area in the country and produce slightly more than one third (36.48 per cent) of the total output. Their

use of modern inputs is also relatively at an average level. Thus, they consume 31.64 per cent of total fertilisers, employ 23.92 per cent of tractors, 24.36 per cent of pump sets and account for nearly one third of the total gross irrigated area in India. This large chunk of 102 medium growth districts is spread all over India. As many as 28 of these belong to Uttar Pradesh, 24 are located in Madhya Pradesh, 12 in West Bengal, 8 in Rajasthan, 5 each in Bihar and Gujarat, 4 each in Karnataka, Tamil Nadu, Assam and Kerala and 2 each in Haryana and Andhra Pradesh.

A study of regional variations in growth pattern brings home the momentous nature of challenge facing Indian agriculture. In the first place, radical steps have to be taken to ensure that the negative growth districts come out of their stagnation. However, even more challenging is the fact that a very large number of districts covering large areas have shown a pitifully slow growth rate varying between 0 to 1.5 per cent and another 102 districts have shown a medium rate of growth. This slow growing plodding range of districts with its disproportionately large weight in the total area and output determines the overall growth patterns of agricultural output in the country. It would not be possible to appreciably raise the rate of growth of output in India without bringing about a radical change in the growth pattern of this big chunk of districts.

Changes from Sixties to the Seventies

Table 5 gives details about the changes brought about as a result of differential growth rate in the number of districts, their area and output. These changes are listed in terms of three productivity levels. These very changes are reproduced in a more disaggregated manner in the frequency distribution curve for the sixties and the seventies given in Figure 1 and 2. Looking at the number of districts, one finds that the weightage of low productivity districts has declined and that of high productivity districts has increased over this period. The changes in area indicate the same trend. The area under low productivity districts declined from 29.5 per cent to only 31.36 per cent and the area under high productivity districts increased from 12.61 per cent to 20.27 per cent over the period under study. This indicates that the area curve has become much less skewed. However, the preponderance of low productivity areas continues to be very high even now. One obtains an opposite picture if one looks at the output distribution. The proportion of output produced by the low productivity districts has declined from 23.46 per cent to 15.49 per cent and the proportion of output produced by the high productivity districts has increased from 25.81 per cent to 36.03 per cent. Obviously even though they account for only a fifth of the total area, the high productivity districts now produce more than one

-:26:-

TABLE -5

AREA AND OUTPUT LEVELS IN THE TRIENNIUMS 1962-65 AND 1970-73 ARRANGED BY THEIR RESPECTIVE YIELD LEVELS

Yield Level (Rs./Hect.)	Triennium 1962-65			Triennium 1970-73		
	No. of districts	Area (Hect.)	Output (000 Rs.)	No. of districts	Area (Hect.)	Output (000 Rs.)
Above 1300	48	15655727 (12.61)	53715290 (25.81)	12	25753225 (20.27)	44546544 (36.03)
700 to 1300	135	59389276 (47.85)	53715290 (50.73)	134	61466956 (42.37)	59926759 (48.48)
Less than	106	49083686 (39.54)	24839708 (23.46)	85	39847550 (31.36)	19152017 (15.49)
Total	289	124128689 (100.00)	105890367 (100.00)	289	127066731 (100.00)	123625320 (100.00)

third of the total output and their weightage has substantially increased over the years. This is a very significant development.

We have also calculated the concentration ratio of total agricultural output during the sixties and the seventies. We discover that the Ginni Co-efficient has slightly increased from .250 to .274 indicating an increase in the concentration ratio. This is illustrated in figure 3.

Table 6 gives details of the movement of districts from one productivity range to the other as a result of differential growth rates achieved during the period 1962-65 to 1970-73. Taking all the growth rate categories together, we find that as many as 26 districts moved up from the low productivity category to the medium productivity category because of high rates of growth. The spatial distribution of these districts is given in Table 6. Seven of these 26 districts belong to Madhya Pradesh (Narsimhapur, Bhind, Indore, Morena, Shajapur, Tikamgarh and Surguja), 5 to Rajasthan (Alwar, Bharatpur, Bundi, Chittorgarh and Ganganagar), 4 to Karnataka (Bidar, Chitradurga, Raichur and Tumkur), 4 to Gujarat (Ahmedabad, Jamnagar, Mehsana and Bhavnagar), 4 to Uttar Pradesh (Jalaun, Banda, Hamirpur and Rae Bareilly) and one each to Jammu and Kashmir (Jammu) and Haryana (Gurgaon). These are by and large the erstwhile

TABLE 6
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DISTRICTS WHICH MOVED ACROSS YIELD LEVEL CLASSES OVER THE TRIENNIUMS 1962-65 to 1970-73

Growth Rate Level	Above 4.5 per cent	1.5 to 4.5 per cent	0 to 1.5 per cent	Negative
above Rs.1300/hect.				Nizamabad (A.)
Rs.1300/hect.				Bidar (Karn)
Rs.700 to Rs.1300/hect.	Mikir (N.C.Hills (Assam)) Ambala (Har) Karnal (Har) Kashmir (J&K) Amritsar (Pb) Bhatinda (Pb) Ferozepur (Pb) Gurdaspur (Pb) Kapurthala (Pb) Ronen (Pt) Patiala (Pb) Sangrur (Pb) Bulandshahr (U.P.) Nainital (U.P.)	Junagardh (Guj) Chikmagalur (Karn) Mysore (Karn) Midnapore (W.B.) Murshidabad (W.B.) Nadia (W.B.) Purulia (W.B.)	Cachar (Ass) Kolar (Karn)	Meerut (A.P.) Most Nimar (MP) Jalgaon (Maha) Sangli (Maha) Satara (Maha)
less than Rs.700/hect.	Jamnagar (Guj) Mehsana (Guj) Jamun (J&K) Chitradurga (Karn) Raichur (Karn) Tumkur (Karn) Alwar (Raj) Bharatpur (Raj) Bundi (Raj) Chittaurgarh (Raj) Ganganagar (Raj)	Bhavnagar (Guj) Bhind (M.P.) Indore (M.P.) Morena (M.P.) Shajapur (M.P.) Tikamgarh (M.P.) Banda (U.P.) Hamirpur (U.P.) Rae Bareilly (U.P.)	Ahmedabad (Guj) Narsimhapur (M.P.) Surguja (M.P.) Surguja (M.P.) Jalgaon (U.P.)	

B. The district names are placed according to 1962-65 levels and the arrows show the change by 1970-73.

dry districts to which irrigation came in a big way during the period. On the other hand, 5 districts registered a negative growth rate in productivity and moved down the ladder from Rs. 700 to Rs. 1300 per hectare productivity category to less than Rs. 700 per hectare category. Three of these decelerating districts belong to Maharashtra (Jalgaon, Sangli and Satara) and one each to Madhya Pradesh (West Nimar) and Andhra Pradesh (Medak). The result was that there was a net addition of 21 districts to the medium productivity category from the low productivity category.

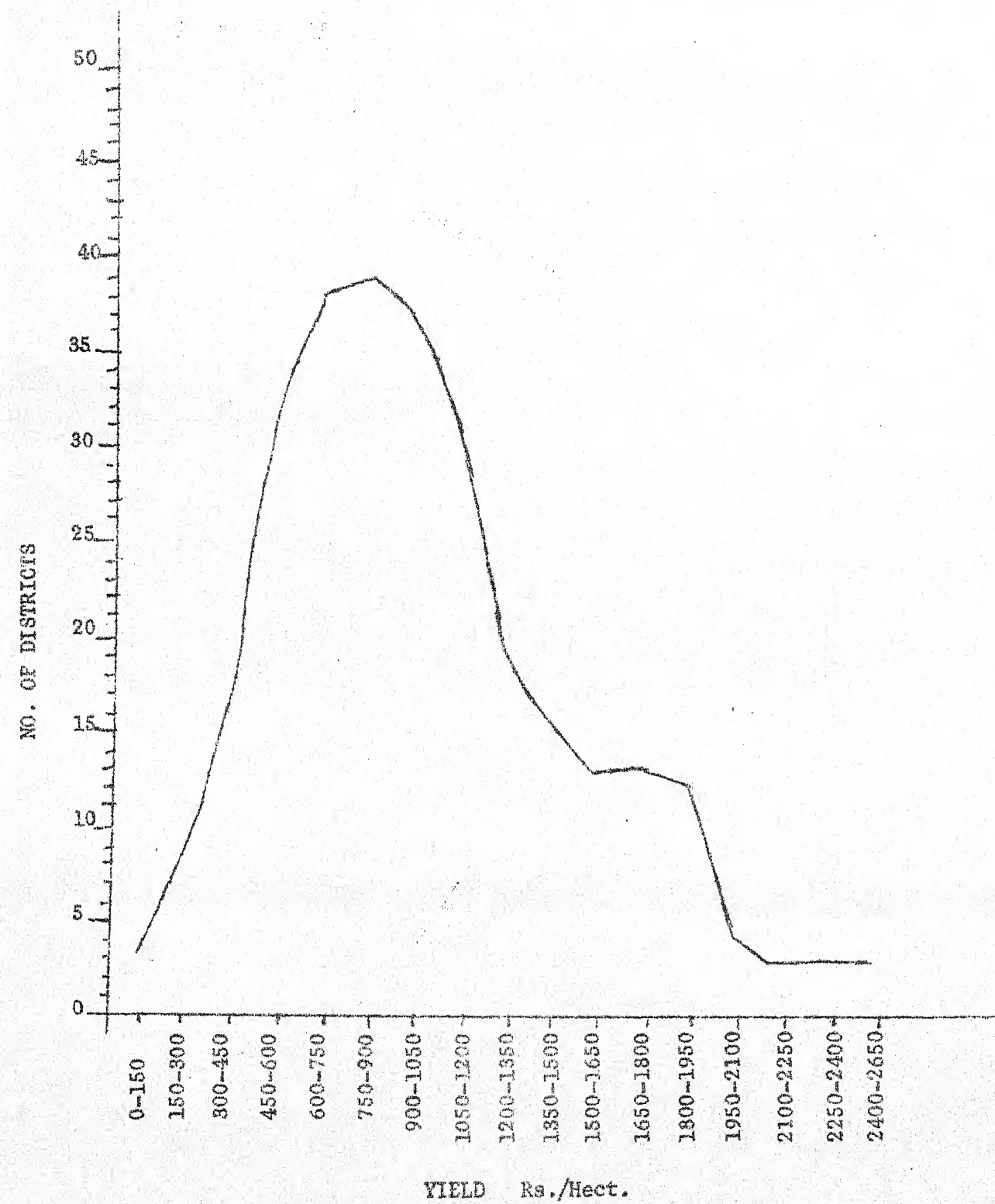
On the other hand, as many as 23 districts moved up from the medium category to the high productivity category because of a substantial rate of growth. The spatial distribution of these high growth districts that were able to move up the ladder is as follows: 8 of these belong to Punjab (Bhatinda, Ferozepur, Patiala, Sangrur, Amritsar, Gurdaspur, Kapurthala and Ropar), 4 to West Bengal (Midnapur, Nadia, Murshidabad and Purulia), 2 to Assam (Cachar and Mikir and North Cachar Hills), 3 to Karnataka (Kolar, Chikmagalur and Mysore), 2 to Haryana (Ambala and Karnal), 2 to western Uttar Pradesh (Bulandshahr and Nainital) and one each to Gujarat (Junagarh) and Jammu and Kashmir (Kashmir). There was only one district - that is Nizamabad in Andhra Pradesh - in which productivity declined from above Rs. 1300

per hectare to between Rs. 700 to Rs. 1300 per hectare, thus bringing it down from the high to the medium category.

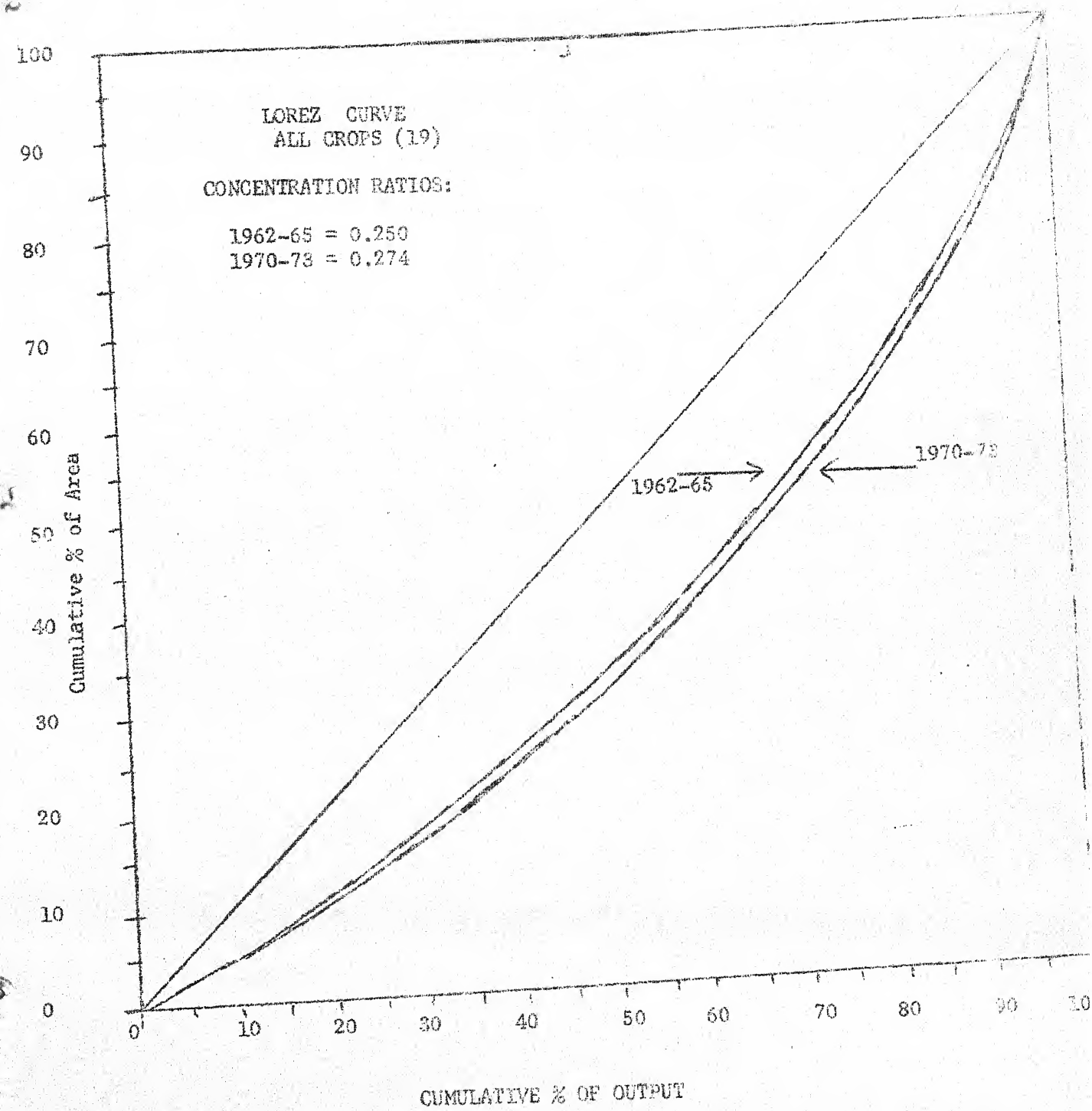
Therefore, there was a net increase of 22 districts in the highest category districts. Because of movements upwards and downwards the total number of districts in the mid productivity category declined by one and in the low productivity category by 21.

We have already analysed the changes in the proportions of area and output brought about by this movement and have underlined the significance of the change brought about by growth in the productivity levels of large areas in India. It is no doubt a very heartening picture. However, it should not be forgotten that even now almost half the area contributing nearly half the output in India is still in the average productivity category and as much as about one third of the area producing nearly one sixth of the output still belong to the very low productivity category. Furthermore high growth (above 4.5 per cent) is confined to only 17 per cent of the districts (18 per cent of area) and 25 per cent of the districts have actually recorded a negative growth rate. The strategy of development will have to aim at simultaneously raising the growth levels in the lowest productivity areas and also taking concrete steps to stimulate growth in the average plodding large mass of districts in India so that they can be made to realise higher productivity levels.

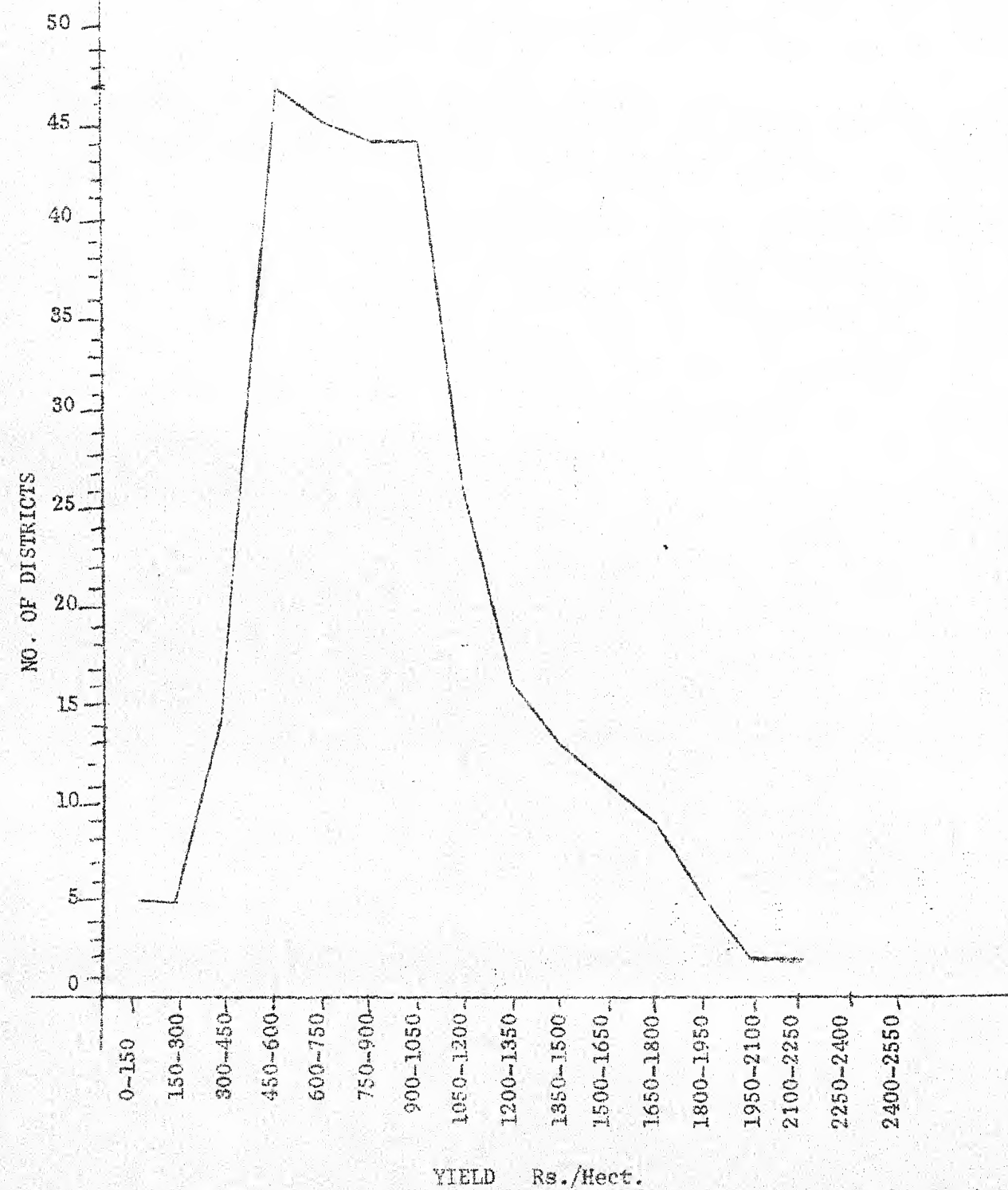
FREQUENCY DISTRIBUTION OF DISTRICTS ACCORDING TO YIELD LEVELS
1970-73



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FREQUENCY DISTRIBUTION OF DISTRICTS ACCORDING TO YIELD LEVELS
1962-65



Seminar
on
Economic Policy Options
(24-25 September, 1977)

Points for Discussion

By

Balwanth Reddy

Venue: Indian Institute of Public Administration,
Indraprastha Estate, Ring Road,
New Delhi.

INVESTMENT

The needs of long-term growth and equity and the persistence of sluggishness in the economy at a time when we have large stocks of foodgrains and substantial foreign exchange reserves, in my view, call for a substantial increase in investment. Since the public sector directly contributes to more than 50 per cent of the total investment and also acts as a catalyst for investment in the private sector, it is necessary in the coming months to concentrate more on investment by the public authorities. The share of the corporate sector in the total investment is around 10 per cent. The demand that will be stimulated by large investment and outlay of public authorities and to a limited extent due to linkages, the private sector will find itself in a more propitious environment to increase its own investment and expand its production. An additional investment of the order of 1,000 crores will be appropriate.

RESOURCES

This stepping-up of public investment has to be a sustained one. This will invariably generate inflationary potential, unless during the current and the subsequent years, the additional purchasing power generated by increased investment is neutralised by substantially more tax receipts or surpluses with public authorities. It appears that during

* The note was originally discussed with the Finance Minister in December 1976.

the last 25 years, whenever public expenditure was stepped up, the revenue and non-revenue receipts of public authorities in subsequent years have not increased correspondingly. This can be explained only in terms of leakages of income at different levels. Even now, there are reasons to believe that a significant part of the additional income so generated escapes the tax net. So, the answer to raising additional resources especially at the Centre does not lie principally in additional taxation or higher rates, but in increased efficiency in tax collection. So far as the States are concerned, a higher rate of tax, particularly on irrigation and efficient administration of local and municipal taxes are matters of great urgency. The Centre should explore the possibility of using its financial assistance to persuade the States and municipal governments to increase the rates of taxation wherever necessary and tone up the tax administration.

PUBLIC DISTRIBUTION

We should acknowledge that wherever large investment outlays by public authorities are necessary, the authorities will have to reckon with their inflationary potential. Poor harvests which accentuate the inflationary pressures are not an unusual phenomenon; they will continue to be with us. In the light of our past experience, it is necessary to commit ourselves to a long-term policy towards meeting such situations. Prices and incomes policy and the policy of public distribution are components of such a packet. The comprehensive analysis of various options relating to prices and income is necessary before launching such a

policy. Any public distribution system could be a part of this long-term policy. The present distribution policy including the dual pricing has not helped the poor to the extent it should have; rather it is the industrial and the urban middle classes who have benefited more from it. On equity considerations alone, the public distribution of essential commodities has to be extended to the poor in rural areas particularly in less developed States at prices which will not adversely affect the supply of these essential commodities. It should be recognised that restricting price regulation to essential consumer goods is not adequate. There are capital and intermediate goods which are equally important for stimulating investment and increasing the production of essential goods and regulations have to be extended to those commodities as well. The number of commodities whose freeplay will remain outside the regulatory system will be so small that they can be ignored for the time being. A buffer of 16 million tonnes at the end of a good harvest seems to be necessary for sustaining the expanded public distribution, especially of foodgrains. This buffer is to be run down during years of bad harvest which probably occur twice every 7 or 8 years. Regulation of prices have to bear in mind the basic forces of supply and demand; ignoring them or minimising their importance or neglecting the supplementary fiscal and monetary measures is likely to create an unhealthy situation.

SUBSIDIES

The industrial policy, particularly, the government assistance to industrial expansion through various incentives requires a closer look. The present structure of incentives, particularly, to the small-scale enterprises discourage them to reap the advantages of scale leading to a high cost economy. On the other hand, giving subsidies by not distinguishing between the implication of plentiful supply of labour and the scarcity of capital, incentive programmes work against the objectives of generating more employment. It is high time to design various subsidies to ensure larger volume of employment.

PATTERN OF INVESTMENT

The pattern of investment will be essentially a technical exercise to be undertaken keeping in view the desired consumption levels of lower income groups and also the existing utilisation rates in different industries. Both from an investment angle and to meet the needs of equity, rural housing and primary education are the two strong candidates for substantial increase in expenditure. The pattern of education hitherto instead of reducing the source of inequalities and inequities, has strengthened the forces that contribute to greater inequity. Incidentally, such programmes will provide jobs to the educated unemployed.

ANNUAL BUDGETS

Time is also ripe for taking a close look at the importance of annual budgets in the context of five-year plans. In view of the duration of the construction period of major projects, it is necessary to explore the possibility of long-term budgeting for such projects which will reduce the unusual importance attached to the annual processes of budgeting so that the work on them is not held up for want of financial resources.

INTEREST RATES

In the present context, there is a feeling that the interest rates charged by various financial institutions are rather on the high side. It is argued that it is partly reflected in the liquidity position of the financial institutions. High interest rates are naturally to the disadvantage of enterprises. Therefore, at a time when the economy is sluggish, there appears to be some justification for bringing down the interest rates. If interest rates are the regulators of allocation of resources between the present and the future, there does not seem to be a strong case for bringing down the interests. The return on capital including the capital gains is not all that unelastic compared with the prevailing rates of interest. The proposed investment and outlay should guarantee buoyant markets that are socially necessary where 15 or 16 per cent interest burden can be easily borne. What is perhaps needed at this stage is a rationalization of interest rates so that the range of different types of interests are kept within a narrow band.

POLITICAL ASPECTS

It is necessary that there should be unrestricted access to facts for a proper appreciation of the economy. Even ordinarily, important statistical data relating to Indian economy used to be available with considerable time lag. Now, on top of this time lag, there seems to be some kind of censorship. Even important events of economic interest such as strikes, lockouts, collaborations with foreign capital, price changes, I have reason to believe, are covered by the censorship. It is difficult to obtain a true picture of the economy, factual or institutional, with the present censorship.

The bane of the cooperative movement in the country has been the politicization of the movement. Now, I have come across evidence that the financial institutions are likely to be exposed to a similar atmosphere.

The uncertainties inherent in a political situation like the one we have been living through for the past one and half years is not something that would encourage investment or discourage speculative activity. A more serious study of economic gains of the last eighteen months in terms of causal factors is necessary. Personally, I believe the government and the Finance Ministry should withdraw these restrictions on the free flow of economic and other relevant information and reduce the political uncertainties before the next budget.

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DECEMBER 16, 1976

Seminar
on
Economic Policy Options
(24-25 September, 1977)

Some Notes on Financial Policy,
Inflation, Growth and Employment

By

Suraj B. Gupta

Venue: Indian Institute of Public Administration,
Indraprastha Estate, Ring Road,
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SOME NOTES ON
FINANCIAL POLICY, INFLATION, GROWTH AND EMPLOYMENT

I

These notes have a very limited focus. They discuss only the role of monetary policy and interest-rate policy in controlling inflation and promoting growth and employment with greater distributional equality. I stress that the pursuit of price stability as a goal of economic policy is not only consistent with the simultaneous pursuit of these other social objectives, but also highly conducive to their attainment.

In these notes I restrict myself to the discussion of only the rate of increase in the general price level, i.e., I would leave alone the excessive increases in the prices of a few particular commodities, such as edible oils, pulses, or raw cotton, etc. Admittedly, the supply-side forces are very important here. But, equally truly, the over-expansion of aggregate monetary demand for output has also made their price situation much worse than it would have been otherwise.

As another aside I may say that mere appeals, threats, or warnings to traders have at best only a limited short-run effect on the price situation by discouraging somewhat speculative hoarding of goods in short supply and curtailing excess profit margins on them. But they do nothing to change

the fundamental fact of excess demand or deficient supply of goods, of which the speculative hoarding of goods is more an effect or a symptom than the cause, unless we are face to face with the market power of a few monopolist or oligopolist producers - traders.

II

Since positive excess demand shows excess of demand in relation to supply, it is only trite to say that the causes as well as remedies of inflation must be looked at the sides of both demand and supply. The obverse of this plain statement is that the excess demand in the goods market is the result of continuous excess increases in the nominal quantity of money - increases far in excess of the increases the public is willing to absorb at growing real incomes and constant prices. This fundamental insight of the modern monetary theory must form the basis of all monetary - financial planning in India.

Historical evidence as well as econometric analysis show that, given the asset preferences of the public and the feasible average rate of growth of real income, we cannot expect the public to absorb more than 4% annual rate of growth of money supply at constant prices, whereas the actual average annual rate of growth of money supply has been far in excess - 9.3% during the 60's. No wonder, we have a long-run tendency

of prices to rise. They have risen at an average annual rate of about 8% since the beginning of the 60's with large variance from year to year. The public's experience of growing prices at varying rates with individual prices growing much more erratically has generated inflationary price expectations with a lot of uncertainty about their rates of increases per unit time. This has affected their behaviour as well as the behaviour of policy-makers and of the publicly - administered factor prices, such as the deposit and lending rates of interest of banks and the government bond rate of interest.

It is, therefore, suggested that for achieving long-run price stability the stock of money be allowed to grow at an average annual rate of only 4% to 5%. This will ensure neither immediate price stability, nor complete price constancy from month to month or year to year, nor the stability of each individual price, but the stability of the general price level over any longer period of (say) 5 to 7 years. However, any short-period departures of the general price level from the flat trend of prices will be mild and largely self-reversing. After a time, the general inflationary expectations will also get eliminated.

III

The forces resulting in the excess increases in the supply of money are diverse as well as powerful. They change

their particular form from time to time. But, at bottom, they are almost always the same - the excess borrowing of deficit spenders (the government and the commercial sector) from the banking system.

The excess deficit spending of the government is obviously the result of its failure to raise enough tax revenues, borrow enough from the public through market loans and small savings mobilisation, earn enough from its public sector undertakings, and keep a strict control over its consumption expenditure. This failure on the fiscal front is deep-rooted as well as wide-ranging. It is the result of a complex interaction of socio-political-economic forces of class interests, inefficiency, corruption, and ignorance, whether it is a matter of tax evasion, appropriate tax-policy, tax coverage or tax concessions, the policy regarding rate-of-interest on government debt, small savings, time deposits, or saving deposits, the pricing policy of public undertakings, etc. This shows the intimate interconnections among various policy variables - fiscal and financial. It also shows on how many fronts the war against inflation has to be fought.

Another important source of excess increases in the quantity of money has been the excess Reserve Bank lending to scheduled banks, whether this is under its Bills Rediscounting Scheme or special refinance for bank lending to priority

sectors (such as food procurement by the FCI and the state government agencies) or ordinary 'lender of last resort' lending even in the face of rapidly expanding reserve base of banks consequent on the excess expansion of reserve money resulting from the net accumulation of foreign exchange assets by the Reserve Bank. This, further, is a result of a combination of factors, such as incomplete appreciation of the money-supply processes by the Reserve Bank, pressure of demand for 'cheap' bank credit by the privileged bank borrowers, and widely-prevailing illusion among the public as well as the policy-makers that merely by expanding nominal credit the supply of real credit can also be expanded to any desired extent. Everyone would possibly wish that the banking system were all that powerful !

Another potent source of increase in the stock of money over the past two years have been the foreign exchange reserves accumulating rapidly with the Reserve Bank. It is strange that in a foreign-exchange-hungry country we find the inflow of foreign exchange a source of economic ills rather than well-being. Basically, it reflects the poverty of our planning and decision-making at the highest level. Even now it has not been declared what to do with our rapidly-accumulating reserves. The decision lags are too long. The execution lags may turn out to be longer. Then, why should we have

invited inward remittances of foreign exchange in the first place ? Only to pay a rate of interest much higher than what the short-term investments of these reserves earn abroad ? What will be the annual servicing cost of it ? What about the continued retention of these deposits ? What will happen if the reverse flow starts ? All these questions need a thorough examination.

The policy makers fully well know that foreign exchange reserves, if not spent, add to money supply. (They should further know that this addition is a certain multiple of the addition so the high-powered money which the accumulation of foreign exchange by the Reserve Bank generates.) Then, is there nothing in the armoury of the Reserve Bank to withdraw, at least temporarily, the unwanted high-powered money or does the Reserve Bank not have any well-defined policy about the desired rate of change in the stock of money ? The Reserve Bank can plead neither helplessness nor innocence. If the RBI were serious about monetary stability, it could have hiked up appropriately the statutory reserve ratio and the statutory liquidity ratio of banks. The first would have mopped up 'extra' reserves with banks and the second would have provided larger bank credit to the government, which would have reduced the deficit financing of the Central Government and the unauthorised over-drafts of the state governments.

IV

There is a lot of misunderstanding in the public mind and in the minds of a large segment of policy-makers about the gains from inflationary deficit finance by the government. Erroneously, they look at only the nominal financial resources gained by the government through its deficit finance, but ignore a whole host of indirect adverse real effects on the government budget, the economy, and the masses. It is extremely doubtful that even the government is a not real gainer from inflationary deficit finance when account is taken of all the losses and gains in real terms to the government from the resulting inflation - e.g., its losses in real terms as the tax authority and as the purchaser and the producer - seller of the goods and services.

For the society as a whole, the harms done by inflation are massive and numerous: it accentuates inequalities in the distribution of income and wealth without generating increased predicted savings, forces deprivations on the destitutes and the poor without any voluntary saving potential, distorts the composition of the basket of goods and services produced domestically and imported legally or smuggled in favour of luxuries consumed by the rich, distorts the structure of economic activity by over-encouraging purely trading-speculative activities at the cost of manufacturing activities, renders all planning fruitless as it makes non-sense all estimates of financial resources, allocations and project costs, forcing

mid-plan revisions, cuts, and rescheduling of projects, etc., and breeds large scale social unrest in the country.

V

Inflation harms both growth and employment expansion. It is well known that the deposit rates of interest earned by savers on other financial assets do not raise fully and in step with inflation. Quite often the realized real rates of return on them turn out to be negative. This factor has hampered greatly the growth of real savings and their institutionalization in the economy. Consequently, the growth, in real terms, of the deposits of banks and post offices, small savings collections, and the business of the LIC have been much less than what a climate of price stability would have yielded.

On the other hand most of the money lending rates of financial institutions, when adjusted for the rates of inflation, turn out to be much lower than the true scarcity value of capital. This has resulted in the excess demand for credit most of the time and further inflationary expansion of money supply. It has also resulted in the encouragement of capital-intensive industries and technologies. (Liberalised investment allowance offered this year by the government will strengthen this effect further.) Both these factors have harmed the growth of employment. So long as external finance remains under-priced in real terms, its misallocation can also not be avoided, whatever the

intentions of the policy makers.

If fuller employment is a desired social objective and for this labour - intensive industries and methods of production are to be encouraged, it is essential that the under-pricing of external funds be done away with and the allocation of credit be suitably altered in favour of the small producers in towns and villages.

P A R T - III

(Restricted Circulation)

Seminar
on Economic Policy Options
(24-25 September, 1977)

Agricultural Census 1971
(Summary and Conclusions)

Venue: Indian Institute of Public Administration,
Indraprastha Estate, Ring Road
New Delhi-110002.

ALL INDIA REPORT
AGRICULTURAL CENSUS 1971

SUMMARY AND CONCLUSIONS

10.1. There are 70.5 million operational holdings in Indian agriculture operating over an aggregate area of 162 million ha. of land, according to 1970-71 Agricultural Census. The average size of the holdings is 2.30 ha. out of which the net area under cultivation is 2.06 ha.

(Paragraphs 8.1 & 8.4)

10.2. The aggregate of 70.5 million holdings is made up of

- 12.4 million wholly irrigated holdings operating over an area of 12.1 million ha.
- 17 million partly irrigated holdings covering an aggregate area of 46 million ha. of which the irrigated component adds up to 17 million ha., and
- 41 million wholly unirrigated holdings operating over a total area of 77 million ha. characterised by rainfed agriculture.

(Paragraph 8.5)

10.3. The total of 70.5 million operational holdings is made up of 58.7 million individual holdings (83.3 per cent) operating an area of 129 million ha. and 11.8 million joint holdings (16.7 per cent) operating 33 million ha.

(Paragraph 8.7)

10.4. Preponderance of marginal holdings (Below 1.0 ha) is one of the dominant features of operational holdings in India. Half the number of operational holdings are marginal, although their contribution to total area is only nine per cent. Nineteen per cent of the holdings are small (1.0-2.0 ha) and they cover 12 per cent of the area. Semi-medium holdings (2.0-4.0 ha.) constitute about 15 per cent of the total number and 19 per cent of the total area. On the other hand medium (4.0 - 10.0 ha) and large holdings (10.0 ha. and above) account for roughly tow-thirds of the area under these holdings. Eleven per cent of the holdings are medium holdings and four per cent are large holdings. In absolute terms 2.8 million holdings which are of 10 ha. and above account for an area of 50 million ha. The average size of large holdings is roughly 18 ha.

(Paragraphs 8.8 to 8.11)

10.5. Over two-thirds of the total irrigated area in the country (67.6 per cent is made up of irrigated areas in the middle groups, viz. small and semi-medium holdings (39.0 per cent) and medium holdings (28.6 per cent).

(Paragraph 8.12)

10.6. Two-fifths of the total area under tubewell irrigation in the country is made up of areas located in the small and semi-medium holdings. Canal irrigation accounts for a little over two-fifths of the total irrigated area in all the size groups. Almost two-thirds of the total area under rice cultivation in the country is unirrigated.

(Paragraphs 8.14, 8.15 & 8.24)

10.7. Small and semi-medium holdings (1.0 to 4.0 ha.) account for the largest part of the area under rice cultivation, both irrigated and unirrigated (43.6 per cent and 44.1 per cent respectively). Although marginal and sub-marginal holdings (less than 1 ha.) constitute one-half of the total number of operational holdings in the country, rice cultivation by these holdings add up to an area which is less than one-fifth of the total area under rice cultivation.

(Paragraph 8.25)

10.8. Given the substantial role of the small and semi-medium holdings in rice production in the country and the technical and economic viability of these holdings in this group for the cultivation of this crop, it appears to be advantageous if added facilities are given to this category of holdings.

(Paragraph 8.27)

10.9. Greater part of the wheat cultivation in the country is under irrigated conditions (55.9 per cent of the total area under wheat) in contrast to conditions of rice cultivation. Small and semi-medium holdings (1.0-4.0 ha.) account for the largest part of the area under wheat cultivation (38.2 per cent of the irrigated area and 30.0 per cent of the unirrigated area), a phenomenon noticed in rice cultivation as well. Added facilities to the small and semi-medium holdings (which account for the largest area under wheat) towards raising wheat production in the irrigated areas and strengthening unirrigated cultivation through supplementary (minor) irrigational

facilities would be a distinct advantage to the economy.

(Paragraphs 8.28, 8.29 & 8.31)

10.10. Small and semi-medium holdings (1.0-4.0 ha.) account for the largest part (about two-fifths) of the area under maize, both irrigated and unirrigated. Similar is the position in case of barley.

(Paragraphs 8.34 and 8.35)

10.11. There are about 7 million operational holdings engaged in the cultivation of jowar and bajra under marginal and sub-marginal conditions constituting 72 per cent of the total operational holdings devoted to these crops.

(Paragraph 8.38)

10.12. Marginal and sub-marginal holding which constitute one-half of the total operational holdings, account for only 8 per cent of the total area under pulses cultivation.

(Paragraph 8.42)

10.13. Large holdings (10 ha. and above, account for about 16 per cent of the total area under sugarcane both in the irrigated and unirrigated areas.

(Paragraph 8.44)

10.14. Medium and large holdings together account for 63 per cent of the total area under oilseeds.

(Paragraph 8.48)

10.15. The bulk of cotton cultivation in the country is on the part of operational holdings of a size of 4 hectares and

above, which account for 77 per cent of the total area under cotton.

(Paragraph 8.49)

10.16. Jute cultivation in the country is largely an activity of semi-medium, small and marginal holdings.

(Paragraph 8.50)

10.17. The aggregate land under operational holdings which is cultivable but not being cultivated is of the order of 12.4 million ha. One-half of this land is situated in large holdings (10 ha. and above). The reasons for such large area lying uncultivated need to be explored and measures should be taken to bring this area under cultivation wherever feasible.

(Paragraphs 8.54 to 8.56)

REGIONAL SIMILARITIES AND DIVERSITIES IN INDIAN AGRICULTURE

10.18. Uttar Pradesh, the largest State of the Indian Union in respect of population has the largest number of operational holdings numbering 16 million (22.2 per cent of the total holdings in the country) and operating over an area of 18 million ha. (11.2 per cent of the total area under the holdings in the country).

(Paragraph 9.3)

10.19. Although the total area of operational holdings constitutes nearly one-half of the total geographical area of the country as a whole, in respect of individual State, the extent of area under operational holdings out of geographical area of the State varies widely. The States of Punjab and

Haryana with vast areas inside the State consisting of plains cover nearly four-fifths of their geographical area for agricultural exploitation. At the other extreme are the predominantly mountainous States of Jammu and Kashmir and Himachal Pradesh which have 4 per cent and 17 per cent respectively of the geographical areas presently under agricultural activities.

(Paragraphs 9.8 and 9.9)

10.20. Uncultivated portion of the total area under operational holdings in the States of Rajasthan, Maharashtra and Madhya Pradesh are of a sizeable importance, 3.4 million ha. in Rajasthan, 3.1 million ha. in Maharashtra and 2.7 million ha. in Madhya Pradesh. Some part of this uncultivated area is, however, not fit for cultivation.

(Paragraph 9.10)

10.21. The States of Uttar Pradesh Andhra Pradesh, Punjab, Tamil Nadu, Rajasthan, Bihar, Haryana and West Bengal together account for 77.5 per cent of the net irrigated area in the country.

(Paragraph 9.33)

10.22. Eighty-four per cent of the canal irrigated area and 62 per cent of the well irrigated area in Rajasthan are in holdings above four hectares.

(Paragraph 9.34)

10.23. The States of Uttar Pradesh, Punjab, Haryana and Bihar account for 94 per cent of the area under tubewell irrigation.

Sixty-seven and 57 per cent of the area irrigated through tubewells in the States of Uttar Pradesh and Bihar are in holdings below four ha. whereas in Punjab and Haryana 65 and 69 per cent of the tubewell irrigated area are in holdings above 4 ha. respectively.

(paragraph 9.35)

10.24. The States of Uttar Pradesh, Bihar and West Bengal of the Indo-Gangetic plains, the Southern States of Andhra Pradesh and Tamil Nadu and the Northern States of Punjab and Haryana alongwith Rajasthan, together account for 85 per cent of the wholly irrigated holdings of the country, both in terms of number of holdings and their area.

(Paragraph 9.49)

10.25. These are also the eight States, viz. Uttar Pradesh, Bihar, West Bengal, Andhra Pradesh, Tamil Nadu, Punjab, Haryana and Rajasthan which together account for the greatest part of the major irrigational facilities in the country (77 per cent of the total area under canal irrigation in the country lies within these States).

(Paragraphs 9.17 to 9.22)

10.26. Large wholly irrigated holdings (10 ha. and above) exist in considerable numbers only in Punjab Rajasthan, Bihar and Haryana. The largest number of these holdings are in Punjab (27,906 holdings with a combined area of 363,556 ha). Next comes the State of Rajasthan (12,522 holdings with a combined area of 199,264 ha.).

(Paragraphs 9.56 & 9.57)

10.27. There are 6.3 million wholly irrigated holdings in the country of a size of less than half-an-hectare; this means that more than half the total number of wholly irrigated holdings belong to the sub-marginal category. In Uttar Pradesh alone there are 2.5 million such holdings and another half-a-million in Bihar. The States of Andhra Pradesh and Tamil Nadu together account for 1.8 million such holdings.

(Paragraph 9.50)

10.28. In the States of West Bengal, Tamil Nadu, Uttar Pradesh, Andhra Pradesh and Bihar, the largest part of the area under the wholly irrigated holdings in the State belongs to the small and semi-medium holdings (58 per cent, 47 per cent, 45 per cent, 44 per cent and 43 per cent respectively). In these States, medium holdings (4.0 to 10.0 ha.) rank next in importance in respect of the share in the total area of irrigated holdings.

(Paragraphs 9.52 and 9.54)

10.29. In the States of Punjab, Haryana and Rajasthan, it is the medium category (4.0 to 10.0 ha) that accounts for the largest part of the area under the wholly irrigated holdings of the State (39 per cent, 36 per cent and 31 per cent) respectively. Next in importance are the small and semi-medium holdings. It is of interest to note that the area situated in the large holdings (10 ha. and above) constitutes a sizeable proportion in these States (19 per cent in Punjab and Haryana and 29 per cent in Rajasthan).

(Paragraphs 9.54 and 9.55)

10.30. Marginal and sub-marginal holdings (less than 1 ha.) on an average have only 0.3 ha. as the irrigated component of the holdings, and the figures is as low as 0.2 ha. and 0.1 ha. in Bihar and West Bengal.

(Table 9.18)

10.31. There are about 7 million partly irrigated holdings in the country in the small (1.0 - 2.0 ha.) and semi-medium (2.0-4.0 ha) category, and these holdings account for an aggregate irrigated area of about 6.1 million ha.

(Table II of Part II, Statistical Tables)

10.32. Medium holdings (4.0 to 10.0 ha.) and large holdings (10 ha. and above) are generally marked by a low irrigated component in the area under the holdings. The average size of the irrigated component in a partly irrigated holding of the group: 4.0 to 10.0 ha. ranges from 3.9 ha. in Punjab and 3.2 ha. in Haryana to 1.4 ha. in Andhra Pradesh and 1.3 ha. in West Bengal. In respect of the large holdings (10 ha. and above), the range of the irrigated component in a holding is from 9.6 ha. in Punjab and 7.6 ha. in Haryana to 3.3 ha. in West Bengal and 2.8 ha. in Andhra Pradesh.

(Table 9.18)

10.33. About 41 million operational holdings (out of the total 70.5 million) do not enjoy any sort of irrigational facilities. The aggregate area under these holdings depending on rainfed agriculture is of the order of 77 million ha.

(Paragraph 9.45)

10.34. Nearly one-half of the total unirrigated holdings of the country lie in the Eastern region (Assam, West Bengal, Orissa, Bihar and eastern parts of Uttar Pradesh and Madhya Pradesh). The average size of the holding is in the range of 1.7 ha. (Orissa) to 0.86 ha. (Uttar Pradesh),. Rice is the dominant crop of rainfed agriculture in the region but yields (in comparison with irrigated area) are strikingly low. Moreover, cultivation is exposed to the recurring hazards of floods and drought. (Of the 23 million ha. of area under rainfed rice in the country, this region alone accounts for 20 million ha.)

(Table 9.13)

10.35. The other vast zone of wholly unirrigated holdings is in the western part of the country comprising the States of Rajasthan, Gujarat, Maharashtra and the adjoining areas in the States of Madhya Pradesh, Andhra Pradesh and Karnataka. Wholly unirrigated holdings in this region add up to some 17 million representing about two-fifths of the country's total in this regard. The average size of the holding ranges from 4.34 ha. (Rajasthan) to 2.01 ha. (Andhra Pradesh). However, the meagre conditions of rainfall in this arid and semi-arid region permit only the cultivation of coarse grains such as jowar and bajra, which are marked by low and uncertain yields. The comparatively larger size of an average holding in this region does not confer any added income advantage.

(Table 9.13)

10.36. Separate figures of operational holdings devoted to individual crops are not available. However, on the basis of some indirect estimation, it is found that there are some 7 million operational holdings of a size of less than 4 ha. cultivating jowar and bajra in the country (essentially in the western region) and these constitute 72 per cent of the total number of holdings (9.7 million) cultivating these crops. However, the area under the holdings that are below 4 ha. in size, constitutes only 28 per cent of the total area under jowar and bajra resulting in an average size of only 1.2 ha. per holding for 7 million holdings. In contrast, 2.7 million holdings of a size of 4 ha. and above command 72 per cent of the total area under jowar and bajra in the country. In terms of levels of agricultural income, the vast number of holdings cultivating jowar and bajra under arid and semi-arid conditions, with an average size of holding of 1.2 ha. appear to be the most adversely placed.

(Paragraph 8.38)

10.37. Holdings below 4.0 ha. account for largest part of the area under rice cultivation in most of the States, except Madhya Pradesh, Punjab, Haryana and Rajasthan. In Madhya Pradesh which ranks fourth in the country in terms of rice area 64 per cent of the area under rice is in holdings above 4.0 hectares. On the other hand in the States of Uttar Pradesh, West Bengal, Tamil Nadu and Assam 74 to 80 per cent of the area under rice cultivation is in holdings below 4 hectares.

(Paragraph 9.85)

10.38. Unlike rice, bulk of the wheat area is in holdings

which are 4.0 ha. and above in most of the States, except Uttar Pradesh and Bihar where 70 and 60 per cent of the wheat area are in holdings below 4.0 hectares.

(Paragraph 9.96)

10.39. In Madhya Pradesh, Punjab and Haryana bulk of the area under maize (53 to 71 per cent) is in holdings above 4.0 ha. In contrast to this 75 and 60 per cent of the area under maize in Uttar Pradesh and Bihar respectively are in holdings below 4.0 ha.

(Paragraph 9.98)

10.40. Operational holdings of 4.0 ha. and above account for 70 per cent of the area under jowar at the all-India level. This is true even at the State level in the predominantly jowar growing States.

(Paragraph 9.101)

10.41. In Rajasthan which accounts for the largest area under Bajra in the country, it is grown mostly in holdings of 10.0 ha. and above.

(Paragraph 9.101)

10.42. Except in Uttar Pradesh and Bihar where 64 and 58 per cent of the pulses area are in holdings below 4.0 ha. in all other States more than 60 per cent of the area is in holdings above 4.0 ha.

(Paragraph 9.103).

10.43. More than half of the area under sugarcane in Uttar Pradesh is in semi-medium (2.0 -4.0 ha) and medium holdings. (4.0-10.0 ha.)

(Paragraph 9.105).

10.44. In Gujarat (which has the largest area under oil seeds in the country) four-fifths of the area is in holdings of 4.0 ha. and above.

(Paragraph 9.107)

10.45. Holdings of 10.0 ha. and above are of considerable significance for cotton cultivation in most of the cotton growing States.

(Paragraph 9.109)

10.46. Jute cultivation is mainly in the marginal, small and semi-medium holdings. More than four-fifths of the area under jute in West Bengal (which has the largest area in the country) is in holdings below 4.0 hectares.

(Paragraph 9.111)

10.47. Four States, viz. Rajasthan, Madhya Pradesh, Maharashtra and Andhra Pradesh together have 8.3 million ha. of un-utilised land in the holdings.

(Paragraph 9.114)

10.48. About eighty per cent of the un-utilised land available for cultivation in the States of Rajasthan, Madhya Pradesh, Maharashtra, Andhra Pradesh and Karnataka is in the holdings of 4.0 ha. and above.

(Paragraphs 9.114)

(Restricted Circulation)

Seminar
on
Economic Policy Options
(24-25 September, 1977)

Notes
on
Indian Economy

By

Charan Singh

Venue: Indian Institute of Public Administration
Indraprastha Estate, Ring Road,
New Delhi.

AGRARIAN STRUCTURE

The question arises: how to increase the agricultural production. The total area of land in the country is fixed and cannot be changed or increased by any efforts man may make. Its productivity, however, depends greatly on the manner it is held and operated or the kind of agrarian structure it may have -- whether an independent peasantry, cooperative or collective farms, huge state or private farms? Our agrarian organisation (in fact, the entire economy) can possibly have only four aims:

a) Maximum production of wealth or eradication of poverty. With that end in view (along with a transformation in our social and economic attitudes), India requires a system of agriculture which will produce or help produce more and more food and raw materials as time passes:

b) Provision of full employment. Although the ultimate aim is to have fewer and still fewer men working on the soil so that more and more workers are released from agriculture for absorption in production of industrial goods and services that a civilized society needs, as long as there are millions upon millions of unemployed and under-employed persons in the country waiting for employment or full employment, we need to have an agrarian system which, compared to all others, provides the largest employment possible per acre;

c) Equitable distribution of wealth or avoidance of undue disparities in incomes. With that end in view, ceilings will have to be imposed on present possessions and future acquisitions of land: if possible a floor will also have to be laid down; and

d) Promotion of the way of life we have chosen for ourselves, in other words, emergence and strengthening of democratic trends. This will require that every cultivator is made the proprietor of the land he holds, which means that no threat of ejectment will keep hanging over his head any longer.

It is contended that an independent peasantry owning the small holdings it possesses, linked together by service cooperatives, will fulfil all the four aims above.

"Unless those who work the land own it, or are at least secure on the land as tenants," says Mr. W.A. Ledejinsky, "a leading internationally authority of land reforms and agriculture and a World Bank Consultant, with experience in Japan, Formosa and South Vietnam, "all the rest is likely to be writ in water. And this is the most difficult step to achieve. It is relatively easy to use science to increase production, but only if the cultivator's relationship to the land and the state's treatment of him and of agriculture create incentives to invest, to improve the land and to raise productivity."

Farm tenancy, therefore, needs to be replaced by peasant proprietorship which means that landlordism has to be abolished, lock, stock and barrel. Every cultivator of the soil, irrespective of his status under the existing law, has to be given permanent rights and brought into direct relationship with the state. No intermediary or landlord should be permitted to resume land from tenants for self-cultivation, and no farmer to lease out his land unless he is a member of the armed force of the Union, suffers from an unsound mind or is physically handicapped from carrying on cultivation.

If Communism, whether of the moderate or extreme variety, has raised its head in Kerala, Andhra, West Bengal or Bihar and violence and discontent stalk in many a part of the country, it is largely due to a breach between the profession and the practice of Congress leadership in regard to abolition of landlordism. Perhaps, there is no sphere where the gulf between official policy and performance has been as wide as in the case of land reforms. Sub-tenants and those who were genuine tenants but, owing to the rapacity of the landlord and the patwari or village record-keeper, were recorded as trespassers, were thrown out summarily all over the country, except in Uttar Pradesh where they were granted permanent rights. Further, bataidars or share-croppers and non-occupancy tenants

of Sir or khud-kasht (self-cultivated) lands of the zamindar have, perhaps, not been recognised as tenants in any other state except, again, in Uttar Pradesh and were still liable to ejectment at the landlord's pleasure as before. Not only that: in most of the States innumerable persons who were recognised under the law as genuine tenants during the days of the British, were ejected in the name of the sacred right of the landlord, to resume land for his own cultivation. For example, in Maharashtra alone, in the decade following the first tenancy reforms in 1948, land-owners resumed 1.7 million acres for personal cultivation and two out of every three "protected" tenants lost their lands.

In fact, only in Uttar Pradesh has a well-thought out comprehensive legislation been enacted and effectively implemented. There, millions of tenants and sub-tenants were made owners and hundreds of thousands who had been evicted, were restored in their rights".

Mr. Ladejinsky concluded:

"Many a good piece of agrarian reform legislation has arrived still-born in India, but in Uttar Pradesh it went hand-in-hand with enforcement and important attainments. The lesson to be drawn from this is but one: it can be done when there is a will to do it".

A study undertaken by Government of India in 1969 into the "Causes and Nature of the Current Agrarian Tensions" and discontent in certain parts of the country reached the same conclusions which were reinforced by a World Bank report presented at a meeting of the Aid-India Consortium held in Paris on June 17-18, 1971.

According to the World Bank report:

Legislation has yet to be enacted for the abolition of some of the intermediary tenures and interests in Assam, Telengana (Andhra), Himachal Pradesh, Jammu and Kashmir, Punjab and Tamil Nadu. Tenants and share-croppers in Andhra, Bihar, Saurashtra and Tamil Nadu continue to be insecure. In Haryana and Punjab, security of tenants is subject to a continuing right of resumption by the landlord. There are widespread circumvention of laws meant to prevent eviction;

And

The statutory rent or share of the crop payable to the landlord is on the high side in Andhra, Haryana, Punjab, Jammu and Kashmir (in respect of small holders) and Tamil Nadu.

The World Bank report suggest at least four steps to be taken: First, preparation of record of tenancies; second, fixation of cash rents as a multiple of land revenues; third, abolition of right of resumption by landlords for personal cultivation or permitting it only in exceptional cases; and fourth, regulation of surrenders by the tenants. Otherwise, the report said, "the time is fast approaching when rural poverty problems cannot be evaded, in part, because of the strain they impose upon the country's stability."

To quote WJ Spillman: "The greatest profit from the business as a whole involves the greatest profit per unit of the limiting factor. Thus, if land be the limiting factor, the aim should be to make the largest profit per acre. If labour limits the business, the aim should be the largest possible profit per unit of labour. Similarly, if the limiting factor be materials, the aim should be the greatest profit per unit of materials" (vide The Law of Diminishing Returns, p. 43).

The area of land that is available for production in our country today is, for all practical purposes, fixed; there is little possibility of extension of agriculture by reclamation and colonization. In other words, land is relatively scarce and constitutes the limiting factor. On the other hand, because of our large and increasing population, the supply of labour is unlimited. That part of capital which mostly provides traction power today, viz., draught cattle, is also, by no means, scarce. In any case, it can be replaced by improved implements or small machinery without much difficulty.

Our agrarian organization has, therefore, of necessity, to be such as would lend itself to the maximum exploitation of land, that is, as will give us maximum yield per acre even though it may not be consistent with the maximum exploitation of labour and capital. In other words, an

economy where we have to apply to land more or increasing number of units of labour or capital, or of both in order that the fullest use may be made of the former, or, which is the same thing, bigger yields realized per acre, alone will suit us.

Land being the limiting factor in our conditions, our aim must be obviously, not the highest possible production per man or agricultural worker, but the highest possible production per acre. That is what will give us the largest total for India as a whole and thus eradicate poverty or want of wealth in the absolute.

On the other hand, in countries like the USA, Canada, Australia or New Zealand where land is not a limiting factor and labour is relatively scarce, it may be in the national interest to obtain the maximum output per worker rather than maximum yield per acre. Such countries can afford to have an economy which may be wasteful of land.

Statistics after statistics from all over the world as also Farm Management studies conducted under the auspices of the Ministry of Agriculture, Government of India, go to prove that although in sheer theory, size of the farm is irrelevant to production per acre, that is, a large farm should produce as much per acre as a small farm (not more, as there are no economics of

scale in agriculture), yet, agriculture being a life process, in actual practice, under given conditions, yields per acre decline as the size of farm increases (in other words, as the application of human labour and supervision per acre decreases). Many a public man and administrator in India, therefore, who were formerly enamoured of the large farm, have during the last 25 years or so, reluctantly come round to the view that, acre to acre, a small farm produces more than a large farm.

Given below is a Table taken from Dr. Elmer Pendells:

Population in the Loose (New Year, 1952)

contd....

TABLE

ILLUSTRATION OF THE LAW OF DIMINISHING RETURNS

No. of men working the land	Acres of land worked by the total number of men	Total production of the hundred acres in equivalents of bushels of grain.	Production in bushels of grain attributable to the man in the series - who is now considered for the first time.	Average production per man in bushels	Average Production per acre in bushels
1	2	3	4	5	6
1.	100	200	200	200.00	2.00
2.	100	500	300	250.00	5.00
3.	100	900	400	300.00	9.00
4.	100	1,250	350	312.50	12.50
5.	100	1,540	290	308.00	15.40
6.	100	1,780	240	296.67	17.80
7.	100	1,980	200	282.85	19.80
8.	100	2,150	170	268.75	21.50
9.	100	2,300	150	255.55	23.00
10.	100	2,440	140	244.00	24.40
11.	100	2,575	135	234.09	25.75
12.	100	2,705	130	225.42	27.05
13.	100	2,830	125	217.69	28.30
14.	100	2,950	120	210.71	29.50
15.	100	3,067	117	204.47	30.67
16.	100	3,181	114	199.81	31.81
17.	100	3,292	111	198.65	32.92
18.	100	3,400	108	188.88	34.00

Clearly, there is less production per man if more than four men work the 100 acres. The more the workers the less is their per capita production. Dr. Elmer Pendell says that he chose soil which was not very good and where the farmers had only a little help from tools. Nor would tools make a difference to per capita production, at least, when as many as 18 men have to support themselves on a hundred acres. For, less the ground a man has, less the advantage he has in the use of farming equipment.

John Lossing Buck, in Land Utilization in China, a book published in 1937 by the University of Chicago Press reported the results of an extensive study of Chinese farms:

Production on Chinese Farms				
Farm Group	Men equivalents per 100 crop-acres	Crop-acres per man-equivalent	Production per man-equivalent in bushels of grains.	Production per acre in equivalents of bushels of grain
1	2	3	4	5
A	25.00	4.00	76.1	19.0
B	31.25	3.2	62.0	19.4
C	38.46	2.6	53.5	20.6
D	47.62	2.1	43.1	20.5
E	66.67	1.5	30.6	20.4

Here we have a striking statistics showing of diminishing returns. It is something like our other table except that this one shows a condition at a subsistence level and an arrival at an actually declining yield per acre. There is no scientific reason however why production per acre should go down if the area of the farm decreases beyond 2.6 acres. May be, the diminutive size of his holding affects the psychology of the farmer.

The above results are well-nigh universal: output per acre of investment is higher on small farms than on large farms. Thus, if a crowded, capital-scarce country like India has a choice between a single 100 - acre farm and forty 2.5 acre farms, the capital cost to the national economy will be less if the country chooses the forty small farms.

There is a second reason also in favour of the small farm. India is faced with the problem of unemployment. National interest, therefore, demands an agrarian economy which, while serving to extract the maximum out of the land that constitutes the limiting factor in our circumstances, will provide the optimum of employment for the rural folk.

Largely because of diseconomies of management and difficulty in supervision of a large number of hired

workers, large holdings attract the use of large machines, thus displacing labour, whereas small holdings limit the use of the machines, thus employing more human labour. As statistics would show, the number of workers employed per 100 acres in regions or countries where small holdings predominate, is greater than that employed in countries where large holdings form a large percentage. For example, Japan, Taiwan and South Korea with an average holding of 2.92, 3.14 and 5.12 acres, carry a population per 100 acres (of arable land and land under permanent crops) of 87, 79 and 89 workers respectively. Whereas the corresponding figures for the USA, Mexico and Brazil stand at 302.65, 305.93 and 178.95 acres and 112 and 17 workers respectively*.

Lastly, a system of agriculture based on small enterprises where the worker himself is the owner of the land under his plough, will foster democracy. For, it creates a population of independent outlook and action in the social and political fields. The peasant is an incorrigible individualist; his avocation, season in and season out, can be carried on with a pair of bullocks or a small machine in the solitude of Nature without the necessity of having to give orders to, or, take orders from anybody. That is why the peasant class everywhere is the only class which is really democratic without mental reservations.

* FAO Production Year Books, 1966 and 1968.

Further, the system of family-sized farms or peasant proprietorship ensures stability because the operator or the peasant has a stake in his farm and would lose by instability.

So that a system of peasant proprietorship not only produces more wealth, provides more employment and removes glaring disparities from land but will also prove the most secure base of democracy. The liberty of the worker - a condition precedent to successful functioning of democracy - varies inversely with the size of the undertaking in or upon which he is employed.

Such is the land tenure or agrarian structure that our natural endowment and the kind of society that we hope to develop viz., democracy, dictate. Yet, obsessed with the seeming advantages of large-scale farming adumbrated in the Marxist literature, Communists and their fellow-travellers in our country, who do not know much about the village or the farmer, are often heard equating land reforms with Cooperative farming under which peasants will pool their individual land-holdings in order to form or produce a large farm which will be worked jointly by them all. Such a farm will necessarily be operated by large machinery. These well-wishers of the peasantry and the country believe that the use of large machinery will, by itself, increase per acre production in some

mysterious way, and would not pause to think or argue. So, instead of adjusting agricultural machinery and its utilisation to the given size of the holding, which, in India, as in many other countries is small, they have decided to adjust the size of the holding itself to the requirements of the large machine by establishing large joint farms.

Had large machinery by itself contributed to agricultural production, the yield per unit of land in the United States of America and the Union of Soviet Socialist Republic, where the chief means employed in working a farm is the use of large machinery, would have been greater than in Western Europe and Japan where much less machinery is used. But we find from the following table that the reverse is the case. Although an average land-holding per cultivating family in Japan is the smallest of these countries, viz., 3 acres or so, it will be seen that its output per unit of land is four times higher than in the U.K., ten times higher than in the USA and sixteen times higher than in the USSR. That the production per unit of labour in France, the UK, and the United States is several times higher than in Japan, is irrelevant. Mechanisation of farming operations does improve considerably the yield per unit of labour, but it does not increase the yield per unit of land - and it is this that matters in India more than anything else.

COMPARATIVE LEVELS OF AGRICULTURAL
OUTPUT AND PRODUCTIVITY In 1965

COUNTRY	Gross value added in agriculture	Gross value added per person enga- ged in agri- culture	Gross value added per male person engaged in agriculture	Gross value added in per hectare of arable land
1	2	3	4	5
	\$ Million at US prices		\$ at U.S. prices	
France	5,000	1,573	2,334	154
Germany (FR)	2,482	837	1,821	160
Italy	4,297	867	1,268	203
Japan	5,468	451	948	523
U.K.	2,849	3,223	3,686	132
U.S.A.	23,587	5,429	6,678	50

SOURCE: Angus Maddison, Economic Progress in Japan and USSR George Allen and Unwin Ltd. London, 1969, p. 65.

Agriculture production being a biological process, there are no economies of time and scale in agriculture. Plants occupy the same space to grow and take the same time to mature, on a small farm as on a large one. Nor is there any scientific method technology which can be used on a large farm, and not on a small one. Enlargement of the size of an undertaking, therefore, does not lead to increased production in agriculture, as it does or may do in some branches of industry. On the contrary, inasmuch as incentives in a joint undertaking are weakened joint

farm will lead to decrease in production.

As for a large cooperative farm human nature being what it is, even brothers born of the same mother usually separate from one another after the head of the family has been removed by death or other cause. In the circumstances it is utopian to expect that an average householder will, all of a sudden, identify his interests with the interests of those hundreds of persons in the village or neighbourhood who were total strangers to his life hitherto. A co-operative farm brings together indiscriminately under its banner person with no long-established ties of kinship or social level - Hindue and Muslim, Brahmin and Harijan - owner, tenant and labourer, an agriculturist and a non-agriculturist. Were a man to reach the heights wherefrom he could see his own good in the good of every other human being, he will cease to be a householder that very day. The ties of family language, religions and country would no longer have any meaning for him. In such ideal conditions planning will not be necessary. Economic laws will become infructuous and, indeed, even government will itself become a costly luxury. The mother is able to nurse and nourish her child because she is selfish, because in the child she sees her own image. Did every other child in the village, or in this wide, wide world occupy the same position in her eyes as her own, she might as well

turn a Sanyasini. In our enthusiasm for a millennium right now in our own lives, we must not forget that man is not entirely a rational being. He is governed more by heart than by mind and the heart has not yet made (whether it ever will make, being doubtful) the same advance as the mind which has narrowed down physical space and made the world a smaller place than it was in the days of our forefathers. Scientific progress or progress in control of the outer world has not resulted in greater control of the inner world of the self, without which a large joint economic undertaking cannot be run smoothly or successfully. Man remains as selfish or greedy, proud or jealous, and ambitious as in the days of the Mahabharat, in fact, as ever he was.

The question arises: What should be the size or arrange a small farm that a man may be allowed to possess: In sheer theory as also in justice, possession or distribution of land in any country should be governed by the principle that none is allowed to hold an area of land which, under its particular technique of farming, is beyond the capacity of an average man or worker to manage, and none possesses less than an area below which, how-so-much labour may be applied to it, land will not produce more per acre. In other words, the upper limit of the farm shall be governed by the working capacity of one worker or one unit of manpower and the lower limit by the productive capacity of one unit

of land. Statistics taken from the two tables quoted in previous pages, would indicate that under conditions of non-mechanised farming or farming by manual and animal labour - and this is the only type of farming that we need to consider in our country - as more and more men work a given land area, that is, as area per man decreases, production per acre increases with such great strides that production per man also increases, till land per man is reduced to a point between 33.3 and 25 acres, to be exact, to an area of 27.5 acres. It is at this stage or acreage that the "Law of Diminishing Returns" per man begins to operate. Below 27.5 acres, production per man begins to fall off as the area decreases although production per acre continues to increase till land per man is reduced to a point between 2.6 and 2.1 acres, say, 2.5 acres. So that, if the area a man possesses amounts to more than 27.5 acres, land is not fully utilized because of lack of sufficient labour and, if it amounts to less than 2.5 acres per worker, labour is not fully employed because of lack of sufficient land. In between these two levels, the more land a man or an agricultural worker has, the better for him as his total production will rise with every acre added to the holding; the less land he has, the better for the country as the country's total production will rise with every acre taken away from the holding.

In our country, therefore, (a) where it is land that is the limiting factor, not labour; (b) where the area of land a cultivating family (usually consisting of two workers) holds on the average today, amounts to a bare 7.0 acres or so; (c) where the rate of population growth is very high, viz., nearly 2.5 per cent per annum; and (d) where industrialization or development of non-agriculture, is proceeding at such a slow pace that the land-man ratio of the farming population is going down instead of going up - it is in the interest of the people that:

- (a) a ceiling on present possessions of land is imposed at a level not more than 27.5 acres per adult worker (including, of course, his wife and minor children, if any) and the area that thus becomes available, is distributed to those who possess no land at all or possess less than 2.5 acres each;
- (b) a floor is laid at 2.5 acres, that is, the law relating to transfer and partition of land in future is so amended that area of land per worker is not reduced below 2.5 acres; and
- (c) future acquisitions of land are so regulated that, along with what he may be already possessing, the total area a man comes to hold, does not exceed a particular limit which may be fixed somewhere between the ceiling and the floor.

Both the actual ceiling and the floor may differ with the circumstances of a region concerned, for example, land; man ratio of its farming population and quality or productivity of the soil.

Inexhaustibility of land gives those directly engaged in working it, a feeling of security, which no other means of occupation can offer. Land never disillusion a man completely; the hope of plenty in the future always remains, and is not infrequently realised. Understandably enough, therefore, there has been much clamour, rather scramble for ownership of land in the country.

Of the 67.4 per cent male workers engaged in directly working the land, only 46.35 per cent are cultivators, that is, enjoy rights of ownership or possession over the land; the rest, viz., 21.05 per cent are agricultural labourers with no rights in land, proprietary or possessory.

As regards disparities in the area of land held by the cultivators inter se, we will refer the reader to the Report on Agricultural Census, Government of India, 1970-71. He will find that while as many as 50.6 per cent of the cultivators together held only 9.0 per cent of the land in 1970-71 only 3.9 per cent the cultivators held as much as 30.9 per cent.

Emphasising two of the arguments in favour of the small size of the farm, which have already been made in the previous page here, P.S. Appu, Joint Secretary, Agriculture and Land Reforms Commissioner said in his report on Ceiling on Large Holdings submitted to Government of India in April, 1971:

"There is a point of view that the fixing of a ceiling on agricultural holdings at low levels and the redistribution of surplus land in countries of heavy population pressure and inadequate avenues of productive employment like India, is likely to lead to an increase in overall agricultural production and fuller utilization of the available man-power. The explanation for both these results is that the owners of big holdings generally depend on wage labour and, therefore, they will employ labour only upto the point where the increase in output resulting from the employment of the last unit of labour is at least slightly above the wage level. No such consideration exists in the case of smaller holdings which are generally operated by family labour. There being no alternative sources of employment, family labour will continue to be employed, far beyond the point where output per unit of labour is equal to the wage level. In fact, as long as there is any hope of increased

production, additional family labour will continue to be employed. Thus, the smaller holdings will be cultivated more intensively leading to enhanced overall production. Simultaneously there is also fuller utilization of the available man-power".

The assumption frequently made that there is a conflict between the two goals of economic growth and social justice or greater economic equality, has no basis at least, in the sphere of agricultural production; rather as we have already seen, they are in harmony. Greater equality in distribution of land would also lead to greater economic growth in the countryside.

Besides Kerala, West Bengal and Andhra Pradesh, communism has raised its head in Bihar, and recently in Tamil Nadu also. The high percentage of agricultural labourers as compared with cultivators in these States, as evidenced by the figures below, explains this situation, at least, in part. So, a demand was raised by the have-nots and rightly conceded by the political leadership that land be redistributed.

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TABLE: Showing Percentage of Agricultural Labour to Cultivators

States	Percentage
Andhra Pradesh	72.93
Assam	16.5
Bihar	69.82
Gujarat	33.66
Haryana	31.62
Kerala	113.65
Madhya Pradesh	33.82
Maharashtra	59.41
Mysore	46.18
Orissa	47.52
Punjab	46.3
Rajasthan	11.55
Tamil Nadu	69.33
Uttar Pradesh	28.64
West Bengal	73.00

Source: Paper I of 1971 Census - Supplement.

It is clear from the following table contained in the All-India Report on Agricultural Census, Government of India, 1970-71 Table No. 9.1, page 41 that redistribution of land could be undertaken with advantage only in Andhra Pradesh, Madhya Pradesh, Maharashtra, Rajasthan, Karnataka, Gujarat, Punjab and Haryana:

NUMBER AND AREA OF OPERATIONAL HOLDINGS 1970-71

I. o.	State	Number '000'	%	Area (000ha.)	%	Average size of holding (ha.)
1	2	3	4	5	6	7
.	Uttar Pradesh	15,639	22.2	18,158	11.2	1.16
.	Bihar	7,577	10.7	11,480	7.0	1.52
.	Andhra Pradesh	5,420	7.7	13,535	8.4	2.51
.	Tamil Nadu	5,314	7.5	7,709	4.3	1.45
.	Madhya Pradesh	5,299	7.5	21,194	13.1	4.00
.	Maharashtra	4,951	7.0	21,179	13.1	4.28
.	West Bengal	4,216	6.0	5,062	3.1	1.20
.	Rajasthan	3,727	5.3	20,341	12.5	5.46
.	Karnataka	4,551	5.0	11,368	7.0	3.20
10.	Orissa	3,407	4.3	6,449	4.0	1.89
11.	Gujarat	2,433	3.4	10,000	6.2	4.11
12.	Kerala	2,305	3.3	1,593	1.0	0.70
13.	Assam	1,964	2.8	2,883	1.3	1.47
14.	Punjab	1,375	2.0	3,974	2.4	2.89
15.	Haryana	913	1.3	3,447	2.1	3.70
16.	Jammu & Kashmir	979	1.4	916	0.6	0.94
17.	Himachal Pradesh	609	0.9	931	0.6	1.53
18.	Remaining States & U.Ts	814	1.2	1,854	1.1	2.28
All India		70,493	100.0	1,62,124	100.0	2.30

According to the Report of Agricultural Census, Government of India, 1970-71, taking the country as a whole, with the ceiling - fixed at 10 ha. or 25 acres, about 8.67 million hectares of 21.675 million acres of land would have become available for the landless even in 1970-71. This is after an allowance had been made for 10 per cent of unculturable waste that was included in the large holdings, and for one-half of the holdings that escaped the axe because of joint ownership. While in fact, only a few lakhs of acres alone have actually been forthcoming despite so much shouting and crocodile tears that were indulged in.

According to official figures, as on July 9, 1976, 4,397,500 acres of land was estimated to be surplus, 20,25,600 acres was declared surplus and only 10,22,000 acres was taken possession of by Government. Of this area, 6,94,500 acres had been distributed amongst 3,54,000 persons, of whom 1,62,000 belonged to scheduled castes or tribes who got 1,97,900 acres in all.

Whatever little utility or potentiality, the programme had, was compounded first, by the power structure of the ruling party and, second, by its inefficiency. Says Wolf Ladejinsky in a report to the Planning Commission:

"Not the least in the controversy about land ceilings, is the fact that the rich and well-to-do farm groups

in India count very much in the inner consels of the Congress Party both in the centre and the States, specially on election day ... Though the number of those subject to the ceiling is small, their influence is widespread through the control of local seats of power and much else The so-called 'vote banks' are still controlled by them as illustrated by the fact in the Punjab Assembly where 45 out of the 64 members are rated as big owners, in Haryana the respective number are 30 and 52, and in Madhya Pradesh 96 out of 220 Congress legislators are reported to have landholdings in excess of the declared limit. Many another State would show roughly the same relationship".

A task force set up by the Planning Commission in 1972 under the Chairmanship of the land Reforms Commissioner, Mr. P.S. Appu, to make a critical assessment of the experience in land reform during the previous plan periods had arrived at the same conclusion when it warned the government that there could be no progress in land reforms in the absence of the requisite political will"(Report, March, 1973).

Second, the drum-beating about imposition of land ceilings as being the only solution of the problem of the rural poor and the rural landless, Congress leadership had

been indulging in, since 1950 put the large farmers on their guard. Much of the surplus land was transferred by them for consideration in favour of strangers or fictitiously as benami in favour of relations of the large holders by the time the legislation was enacted and could be implemented.

Any way, the belief that distribution of surplus land available on imposition of ceilings, was going to solve the problem of the Harijans, the landless or the marginal farmers and thus remove the poverty of the rural society to any appreciable degree, has proved a delusion. However, low the ceiling that might be fixed, the acreage that could be available for distribution, was too little to go around all those who may need it or even a substantial section of them.

The ultimate solution of the economic problem not only of agricultural labourers but also of tens of millions of other poor or unemployed and under-employed persons in the country will depend, by and large, on development of non-agricultural resources - which will, in turn, depend mainly on increased agricultural production and a change in the mental attitudes of our people or a transformation of the national psychology. Obsession with land re-distribution which could at best, buy some time, should not, therefore, be allowed to distract our attention from the real cure of

the ailment any more.

India's ruling party and its policy-makers had been so mesmerised by the notion of land ceilings that the idea of land reform is almost exhausted by that one concept. Cooperative farming to which we will presently refer, no longer holds the field. The reason for their being in love with re-distribution of land is, perhaps, not far to seek. The slogan came handy to the ruling party for abusing the so-called 'kulaks' and advertising its concern for the 'have-nots'.

The Janata Party and its government have now so to create conditions that all those who are unemployed and under-employed including agricultural labourers and the very small farmers (as also the educated unemployed) are attracted to cottage and small-scale industries and other small-non-agricultural enterprises except which there is decidedly no solution of malady at all.

With co-operative or any other form of joint farming ruled out, there is only one measure left in the sphere of agrarian organisation, viz., consolidation of land holdings, that need to be considered, and implemented. We need not go into the details here; one can, however, say without fear of introduction that consolidation of scattered plots will lead to efficient utilization of all the three

factors of production, viz. Land, Labour and Capital.

Consolidation of holdings, however, solves the problem of scatteredness alone; it is no answer to the problem of the marginal or uneconomic holding. With passing of time and lack of non-agricultural occupations, uneconomic holdings which are unable to find employment for an average-sized family or to keep it in bread and cloth, if not in reasonable comfort, are multiplying fast.

It has already been pointed out that transformation of peasant proprietorship into joint farming is an institutional change that will always and everywhere meet with the peasant's resistance. Also, it does not help increase agricultural production, reduce-unemployment or strengthen democratic behaviours. On the other hand, there are technical improvements or technical facilities which the peasant will welcome, viz., irrigation water, manure, improved seeds, pesticides, and better farming practices in general, that actually go to increase the production or income of a farmer, and can be as easily used or introduced on small farms as on big. Large-scale farming is not essential and peasant farming as such, offers no hindrance to technical progress.

All that we have to do, therefore, is to combine the incentive of individual land use and private ownership of land with the advantages of large scale or a large farm.

In our circumstances where holdings are small and will remain small - and, for the matter of that, in the circumstances of most other countries - it is the principle of cooperation that offers the right solution.

Cooperation is the closer union of otherwise independent units - merely coming together of different entities - for purposes of eliminating certain disadvantages attendant upon independent, isolated action. Its real mission is, first, to save the peasants from the disabilities entailed by the small size of their business and their lack of training in the ways of a commercial civilization and, second, to secure to them all the benefits and technical advantages of private property. Cooperation need not extend to the actual act of farming or production, that is, to those functions of farm management which can properly be executed within the boundaries of a single small farm. Such functions should remain the object of the independent individual himself. Were the members of a cooperative society or organisation to sacrifice their economic and individual independence, it would amount to a merger, not cooperation.

Dr. C.R. Fay, Chairman of the Horace Plunkett Foundation, had said in 1943, "Northern Europe has proved to the hilt that the biggest degree of technical excellence

is entirely compatible with family farming but only on two conditions: first, that the land unit is the special subject of state guardianship and, secondly, that individual family effort on the land is supplemented by group effort in purchase, processing and sale".*

As a national policy, therefore, we have to confine ourselves to explain to the farmers the advantages that service cooperatives or pooling of financial resources and cooperation in all-non-farm activities will bring. Our aim must be the creation and maintenance of independent existence individually worked but linked or bound together by the principle of cooperation, rejecting both economic anarchy (prevalent in our country today) and collectivism (that has been ushered in the USSR and China). It is such a system in Japan and Western Europe where the identity both of the farm and the farmer remains unimpaired, that has resulted in greater production per acre than where land and, therefore, labour also have been pooled. As we have already seen, this system results in an agrarian organisation which serves to strengthen democracy. Whereas a joint farm by whatever name it may be called, is advocated only by those who have despaired of the slow progress of democracy and doubt whether they will be able to approach and persuade the vast number of peasants involved. It is easier to manage hundreds of millions of farmers after they have been herded

into a few thousand of cooperatives or joint enterprises. Much as they would like to copy communistic methods and programmes, owing to circumstances beyond their control, they have to resort to democratic terminology in order to put a cloak on their intentions.

Cooperatives will become successful as in Japan, Germany, U.K. and Scandinavian countries only if they spring up as a result of an urge within the people themselves - as an instrument of satisfaction or fulfilment of a common need of theirs. In no country of the world except India, cooperative movement is regarded as a fit subject or policy to be executed through a government department. Our political leaders and economic planners should realise that, looking to the deficiencies of our human factor, genuine cooperatives will take decades to strike roots in our society. They would, therefore, do well to hasten slowly.

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ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

Poverty is another name for lack of goods, agricultural and non-agricultural, which go to satisfy human wants that living creates. It is land that is the ultimate source of all these goods: it produces both food for direct consumption by man and raw materials which will lead to manufacture of non-agricultural goods, again, for indirect or ultimate use by man.

In other words, in addition to providing food for the entire population, agriculture has to provide continuous and increasing quantity of raw materials for feeding the wheels of consumer industries, e.g., textiles, oil-pressing, rice mills, jute, sugar, vanaspati and tobacco manufacture etc. Similarly, forestry and animal husbandry make available various kinds of materials like timber, gum, resin, skin and hides etc., which form the base of innumerable industries.

Unfortunately, India which was a net exporter of food till 1925 has become a net importer of food since the days of the Bengal Famine (1943). While the average annual imports of food over a period of 20 years ending 1970 cost us Rs. 207.8 crores, those during the last five financial years, 1971-1975, cost a much higher figure, viz. Rs. 289.2 crores. During all these years, India has also received wheat from foreign countries in the form of gift. During the period 1965-67, the

gifts amounted to 4576,000 tonnes and during the year 1975, from Canada alone, the gift came to 2,50,000 tonnes valued at Rs.37.8 crores.

Not only food: even raw materials obtainable from agriculture have had to be imported, for example, cotton which forms the raw materials for clothing-the most essential necessity of man next to food. Till 1971-72, the country was, far and away, the top buyer of long staple cotton in the world market.

Surplus food stuffs and raw materials that a developing agriculture will make available, can also play a big role in earning foreign exchange, with which we can finance imports of capital goods for industrial development-capital goods which, under any kind of economy, even an economy of Gandhiji's conception, a country will necessarily have to have.

Despite neglect of agriculture by the ruling party, even as of today (1974-75), the value of exports of agricultural commodities (including products of fisheries, forestry and animal husbandry), both raw and processed, works out to full two-thirds of major exports, that is, 52 per cent out of 79 per cent of the total exports. The value of minor exports, both agricultural and non-agricultural, amounted to 21 per cent. The corresponding figures in 1950-51 stood at 75,77 and 23.

Further, industrial development also can come about only as a result of agricultural prosperity or, at best, it can accompany the latter but can never precede it as, unfortunately, the leadership of the political party which has

ruled the country for a period of thirty years without a break, thought and, perhaps, still thinks it could. It is only when there is purchasing power in the pockets of the farmers that a demand for industrial or non-agricultural goods and services, like education, transport and power, will arise. This purchasing power will be derived from the sale agricultural products, whether inside the country or outside it. Greater the surplus production available for sale, therefore, greater the purchasing power available to the seller or the producer. Where the purchasing power of the mass of the population cannot be increased, that is, where surpluses of food production above farmer's consumption are not available, there cannot be any industrial growth.

While a developing agriculture will furnish purchasing power to the masses with which to buy the manufactured goods and the services, it will also release workers from agriculture for transference to industrial and tertiary employments. With greater and still greater production per acre, consequent on application of more and more capital and higher and still higher technology, fewer and still fewer persons will be required on the same area of land to produce the same quantity of crops.

Further, since development of industries and services required workers, owners of under-sized and uneconomic holdings will tend to migrate to new industrial areas in their own interest-in order to find work with a higher income-with the result that such holdings will cease to multiply and gradually disappear.

Without such release of workers from agriculture and their transference to non-agricultural occupations, there can be no economic development of the country or eradication of its poverty. The reasons are simple: Such goods that agriculture or primary sector produces, and can be used or consumed in the raw form in which they are produced, for example, fruits, milk and water, are few. Most of the products that the primary sector or agriculture makes available, have to be processed by those engaged in the non-agricultural (secondary and tertiary) sectors, before they can satisfy the needs of a civilized man.

Obviously, therefore, larger the number of persons in a country engaged in the non-agricultural (secondary and tertiary) sectors of the economy, that is, in processing of agricultural products, production of non-agricultural goods and provision of services, wealthier the country or higher the standard of living of its population.

A study of statistics will lead to the irresistible conclusion that in all the countries which are prosperous or economically advanced today, there has been over a considerable time past, an increasing shift of workers from agricultural to non-agricultural employments. So that the percentage of agricultural employments. So that the percentage of agricultural workers has gradually declined and continues to decline.

The following table shows the figures of the working force engaged in India and fifteen other selected countries over a long period:

LONG-TERM CHANGES IN THE SHARE
OF LABOUR FORCE IN THE PRIMARY
OR AGRICULTURAL SECTOR

<u>Sl. No.</u>	<u>Countries</u>	<u>Year</u>	<u>Percentage</u>
1.	United States	1880	50.5
		1900	38.0
		1950	11.6
		1960	6.1
		1967	4.2
2.	Australia	1881	38.6
		1901	25.4
		1947	16.8
		1951	10.2
		1966	8.1
3.	Great Britain (Ireland excluded throughout)	1881	12.3
		1901	8.7
		1951	4.5
		1966	2.7
4.	Belgium	1880	24.5
		1900	16.7
		1947	10.9
		1951	6.3
		1967	4.3
5.	Canada	1901	43.6
		1901	18.7
		1951	11.3
		1966	7.6
		1963	8.2
6.	New Zealand	1881	31.9
		1901	29.6
		1945	20.1
		1956	15.3
		1951	13.5
		1966	11.9
7.	France	1866	43.0
		1901	33.1
		1951	20.2
		1954	19.8
		1962	14.4
8.	Netherlands	1899	28.5
		1947	16.8
		1960	9.9
9.	Germany	1882	35.5
		1907	23.8
		1925	17.8
		1933	16.9

Sl. No.	Countries	Year	Percentage
9.	Germany (FR)	1950	11.8
		1961	6.5
		1965	5.4
		1967	4.9
10.	Denmark	1901	42.4
		1940	23.6
		1952	19.9
		1960	16.4
11.	Norway	1875	48.8
		1900	37.1
		1930	34.0
		1960	18.8
12.	Japan	1887	67.0
		1950	32.6
		1960	18.9
		1965	13.7
13.	Italy	1881	45.8
		1901	48.9
		1951	34.9
		1961	23.2
		1967	17.7
14.	Switzerland	1880	32.7
		1900	27.0
		1950	15.4
		1960	10.4
15.	Sweden	1900	42.8
		1940	27.1
		1950	19.3
		1960	12.8
		1965	9.4
16.	India	1881	74.4
		1901	76.1
		1951	77.4
		1961	73.5
		1971	72.05

Source: (for countries except India)

For figures up to 1952, Chapters II and III of the Conditions of Economic Progress (1957 Edition) by Colin Clark, and after 1952, ILO Year-Books of Labour Statistics, 1961, 1966 and 1968 and UN Statistical Year-Book 1962.

Source: (for India)

For year 1981, 1901, 1951, and 1961 Simon Kuznets: The Economic Growth of Nations, Harvard University, 1971, and for the year 1971. India's Census Report 1971.

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If we want our country to develop, there are only two prescriptions: first, increase in agricultural productivity per acre and simultaneous reduction of the number of workers per acre, secondly, a transformation of our national psychology in the sense that Hindus, in particular, give up the belief that this would be not a mere illusion and, as individuals (and also as a nation) we develop an urge to improve our economic condition and, to that end, our people learn to work longer, better and harder. Here, we are not concerned with this, the second pre-condition of economic development, however.

As desired by Nehru, India does need industrialization or development of non-agricultural resources in order that the living standard of the people may be raised. It is, however, in the heavy industry first strategy he adopted, in trying to ape the USSR, that lay his mistake which ruined the economy.

The living standard will be raised, as pointed out earlier, only to extent workers can be diverted from agricultural to non-agricultural occupations and they will be so diverted only to the extent agricultural production (surplus to the needs of the producers) goes up. So that if India has to live and progress there is no escape from agriculture.

It would be wrong to conclude, however, that efforts simultaneously for industrialization in India should be discontinued. Agriculture and industry are to a large part, complementary to each other: it is more a question of emphasis and priorities.

Industrialization as also some of the political leaders of the country often ridicule the suggestion that, at least, in the immediate present, emphasis should be concentrated on agricultural production, and industry relegated to a secondary role. For, it is asked, how could agricultural production increase without a corresponding rise in industrial output? To irrigate the land, for example, we required reservoirs, canals and tube-wells which in their turn asked for cement, steel and power.

Conceding inter-dependence of agriculture and industry, the industrialist, in fact, almost the entire intelligentsia of the country would give first priority to, or place more emphasis on industry. It was a fallacy to hope, they argue, that production on the farms could grow without providing the wherewithals which industry alone could create.

It is this attitude which is at the root of India's economic ruin. While not agreeing with them in regard to the priorities, one may not quarrel with the supporters of the present economic policy that industrialization will help raise productivity in agriculture by supplying consumer goods (e.g. clothes, shoes and books) to act as inducements for agricultural workers as also capital goods (e.g. working capital like fertilizers and fixed capital like iron tools and diesel pumps) to act as inducements for land, in a way. Also, a growing industry (and along with it, as a necessary concomitant, a growing commerce, transport and other services) will provide agriculture with an expanded market due to the

increased demand of the urban population and processing and manufacturing industries for agricultural products, without which expansion in agricultural production will not proceed beyond the point where the farmer has satisfied his immediately-felt needs. This increased demand for farm products from the industrial centres will increase the per capita income of the farmers.

On the other hand, however, it is an advancing agriculture alone which can supply food for industrial or other non-agricultural workers to eat, raw material for industries to process, foreign exchange to purchase capital goods from abroad, an internal market for the products of industry, and workers to run the industries, transport, commerce etc.

There can be no doubt that it is shortfall in agricultural production that has become the greatest constraint on further industrialization or development of non-agricultural resources. Along with deficit financing, it has led to a sharp increase in prices and shrinkage of the internal market, fomented unrest in the cities, provoked a series of strikes among both white-collar employees and manual workers, weakened labour discipline and vitiated the climate for investment.

Thus, development of each is, to a varying extent, both a cause and an effect of the other. Just agriculture will develop and farmers thrive when industry prospers so will industry develop and non-agriculturists thrive as agriculture develops.

All this, however, does not mean that industry is equally important with agriculture. It is agriculture which plays the primary role -- the role of a precursor. While man can do without industrial goods, he cannot do without food. Similarly, while agriculture can, in the ultimate analysis, do without a heavy or capital goods industry, industry cannot do without agriculture at all. Wells, reservoirs and canals can be built, and had been built by our ancestors and by the British -- so also could the cloth, shoes and books be manufactured -- without the aid of any cement, steel or power on any worthwhile scale. Otherwise also, only a small proportion of these commodities is used in agriculture as compared with industry. So far as inorganic fertilizers are concerned, well, organic manures or fertilizers are any day better than inorganic ones -- only if they could be collected and composted as the Chinese have been doing for the last forty centuries.

Economic viability, whether internal or external, cannot possibly be achieved at the cost of agriculture. With this viability is linked up not only domestic political stability but also our international political stature. The mini-States on our frontiers, our traditional allies, are leaving us looking elsewhere for help and protection because India is unable even to maintain itself and has to look around for food from abroad, despite the enormous food production, available on tap.

Right since, and despite achievement of political independence in 1947 the world has been a witness to the strange spectacle of its most highly industrialized nation, U.S.A., feeding a predominantly agricultural nation, India -- a country where 75 per cent of the sown area is under food-grains and $\frac{75}{100} \times (43.34 \text{ cultivators} + 26.33 \text{ agricultural labourers}) = 69.67$, that is, 52.25 per cent of the nation's working force is engaged exclusively in producing food.

As time passes, food will certainly play an increasingly important role in international politics. There is a distinct possibility of food-exporting countries using their exports as a political weapon against the importing countries.

To conclude: If India has to live or make progress its leaders must assign priority NOT to agriculture.

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CAPITAL STARVATION OF AGRICULTURE

As apart from the kind of agrarian structure a country may choose an increase in agricultural production can be brought about if any one or more of the three factors of production, viz., land, labour and capital is increased or/and improvements are made in the method or methods of utilizing these factors, that is, innovations are effected in the farming arts or techniques.

As far labour, it is a variable factor and can certainly be increased. But in most parts of the country our agriculture today is already labour surplus, that is, at the present levels of utilization it contains or disguises more labour than is necessary. Which means that the marginal productivity of labour of a vast multitude in our villages tends to zero. Agricultural workers in these areas are surplus in the sense that their removal or transfer to non-agricultural output. Productivity in such areas would certainly increase if this labour could be fully utilised on the farms or in the village where it finds itself. This calls for a change in the present agricultural practices or techniques. As the experience of the 'green revolution' recently showed us, there are certain techniques (other than mechanization) which require more labour than is employed under present conditions. Besides eliminating under-employment in large parts of the country-side, introduction of such techniques,

therefore, will serve to increase production.

Remains the third factor of production, viz., capital. It is largely a production of human labour, set aside for and used in further production, or, in other words, a product of work carried out in the past, which was not consumed. Like labour, it is a variable factor. Capital can practically be increased indefinitely, provided, of course, that man is prepared to make the necessary sacrifice of not consuming all the product of his labour immediately it is produced. Means which aid or contribute to agricultural production, for example, draught animals, tools or machines and other equipment, seeds, water or sources of irrigation, manures or fertilisers and pesticides or insecticides, can all be classed as capital.

So far as an innovation or improvement in the techniques or art of farming is concerned, it may be defined as a new application of either old or new knowledge to a production process. It aims at a better and still better combination of the three factors of production with a view to getting the most from the resources that may be available.

Therefore, as has already been pointed out, if we seek economic development of the country, that is, want men to be released from agriculture for diversion to industry, commerce, transport and other non-agricultural occupations

inasmuch as they will be released only to the extent agricultural production goes up, with fewer and still fewer men on the soil, capital in land will have to be invested in a far greater measure and technological improvements in agriculture effected at a far greater rate than we imagine, and have planned for. In other words, it can be stated as a rule of thumb that the degree of economic development of India turns on the extent of improvement in agricultural practices we are able to affect and the amount of capital we are able to invest in land.

Next to, or along with the need to invest more and more capital in irrigation and fertilisers, comes the need for research. The most decisive incentive to the farmer can come only from research - increased production as a result of new and newer technology in seed, irrigation or water-management, application of fertilisers, etc. etc.

Industrial production during an equivalent period multiplied 3.6 times - the index rising from 54.8 in 1951 to 200.8 in 1973 (1960 = 100), an annual rise of 12 per cent (simple). Not many industrial countries exceeded this pace. It ranged from 1.1 to 3.2 times the rates of expansion in Belgium, Canada, France, Norway, Sweden, UK and USA.

But as misfortune of the country would have it, whereas while in theory India's planners and political leaders

concede that the creation of an efficient agricultural system is the indispensable precondition of economic developments, in practice they have neglected the land. During the period, 1951-73 agricultural production went up by 75.0 per cent, that is, at the rate of 3.4 per cent only.

Though Government of India has constantly talked about top priority for agriculture and sets ambitious targets of production, public outlays allocated for agriculture in our plans are pitifully low and private capital is offered little or no incentive. In fact, one would be justified in saying that Indian agriculture is deliberately starved of a capital : money has been available with the government for almost everything under the sun excepting for agriculture.

Below is given a table showing actual investments made in the various plans at constant prices (1961-62). It will show that the amount of funds invested during the Third Plan (1961-66) and the Fourth Plan (1969-74) despite a lapse of eight years between the two Plans was virtually the same. The astronomical figures at current prices mentioned in the official literature only tend to, if not actually intended mislead the unwary.

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
ANNUAL PLANS						
1966 - 67	222.99	99.66	269.31	28.69	343.04	1443.97
1967 - 68	187.46	86.72	236.81	25.47	281.31	1246.22
1968 - 69	277.62	106.71	249.45	24.49	317.77	1436.49
Total: 1966-69	688.07	293.09	755.57	78.65	942.12	4126.68
	(16.67)	(7.10)	(18.31)	(1.91)	(22.83)	(100.00)
FOURTH PLAN						
1969 - 70	193.88*	112.65	273.72	23.48	259.21	1287.82
1970 - 71	206.74*	115.79	283.99	23.74	256.82	1393.43
1971 - 72	253.71*	131.53	321.50	25.69	313.53	1661.52
1972 - 73	276.19*	154.76	316.66	26.70	303.38	1799.76
1973 - 74	221.60*	150.59	269.94	21.87	289.34	1647.44 @@
Total: 1969-74	1152.12	665.32	1465.81	121.48	1422.28	7789.97
	(14.79)	(8.54)	(18.82)	(1.56)	(18.26)	(100.00)
FIFTH PLAN						
1974 - 75	203.96	123.10	244.92	21.98	349.30	1547.51
(Outlay)	(13.18)	(7.96)	(15.83)	(1.42)	(22.57)	(100.00)
1975 - 76	228.34	154.63	363.80	24.40	542.94	1974.27
(Outlay)	(11.57)	(7.83)	(18.43)	(1.24)	(27.50)	(100.00)

** = Includes Rehabilitation from Third Plan onwards.

* = Includes Buffer Stock.

@ = Includes provision for Nutrition.

@@ = Excludes expenditure on Nutrition.

Note :- Figures in parentheses represent the percentage share of the relevant "Head" in the Total Plan Expenditure of the period.

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PLAN EXPENDITURE IN THE PUBLIC SECTOR : 1951-52 TO 1975-76

BY BROAD HEADS OF DEVELOPMENT

(Rs. Crores)

Period/Year	Agriculture and Allied Sectors	Irrigation (and Flood Control)	Power	Village and Small Industries	Industry and Minerals	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FIRST PLAN						
1951 - 52	32.09		91.21		11.62	284.03
1952 - 53	37.52		122.39		11.75	334.83
1953 - 54	55.02		133.40		21.96	410.33
1954 - 55	97.29		168.69		27.61	610.94
1955 - 56	147.21		214.87		50.00	830.73
Total:	369.13		730.56		122.94	2470.86
1951 - 56	(14.94)		(29.57)		(4.98)	(100.00)
SECOND PLAN						
1956 - 57	81.96		193.02		96.82	751.58
1957 - 58	98.99		185.65		262.15	1019.83
1958 - 59	121.02		182.60		309.69	1110.24
1959 - 60	133.41		188.64		287.23	1079.60
1960 - 61	140.42		201.30		219.00	1073.18
Total 1956-61	575.80		(951.21)		1174.89	5034.43
	(11.44)		(18.89)		(23.34)	(100.00)
THIRD PLAN						
1961 - 62	148.15	106.00	139.49	38.13	197.71	1130.26
1962 - 63	167.39	110.36	175.73	38.73	249.26	1334.82
1963 - 64	188.31	110.61	235.97	39.68	315.37	1555.04
1964 - 65	206.12	121.93	250.23	42.21	332.61	1647.39
1965 - 66	233.61	132.67	275.78	43.16	399.54	1772.26
Total 1961-66	943.58	581.56	1077.20	201.91	1494.49	7439.77
	(12.68)	(7.82)	(14.84)	(2.71)	(20.09)	(100.00)

It will be seen that there has been no change in the pattern of investment since the Second Plan was launched in April 1956 though the country's food situation has recently become ever critical than before. The allocations for agriculture in the public sector were reduced from 37.0 per cent in the First Plan to 17.3 per cent in the Second Plan, and thereafter never rose beyond 23.4 per cent. While those for organised industry and mining were raised from 4.9 per cent in the First Plan to 23.8 per cent in the Second Plan and thereafter did not fall below 23.7 per cent. In the Fifth Plan as it was finally approved, agriculture was allotted 19.8 per cent and organised industry and mining 24.0 per cent.

As an example of lack of appreciation of the needs of agriculture, it may be pointed out that, while almost a fourth of the country's land suffers from erosion, only a partly sum of Rs. 47.05 crores, in all, has been spent on soil conservation since 1951 till 1973. It must be remembered that soil conservation is equally, if not more, important than soil utilization or raising of agricultural crops.

The break-up of this amount plan-wise is given below:

<u>Expenditure on Soil Conservation</u>	
<u>Rs. in crores</u>	
First plan	0.36
Second Plan	2.07
Third Plan	11.21
Annual Plans (1966-69)	9.45
Fourth Plan	23.96
Total	<u>47.05</u>

Source: Report of the National Commission on Agriculture, Vol. V. p. 392 (1976).

As the latest : While the outlay for industry and minerals was raised from 22.6 per cent in the Annual plan for 1974-75 to 27.5 per cent in the annual plan for 1975-76, that for agriculture (including irrigation) was reduced from 21.1 per cent to 19.4 per cent. In the annual plan for 1976-77 the two figures stood at 27.82 and 20.16 per cent respectively. So that in 1975-76, the allocation for industry was 41.81 per cent higher than that for agriculture, and in 1976-77, 38 per cent - ratios which never obtained before.

In order to arrive at a more precise ratio of allocations between agriculture and industry - between the rural and urban areas - the total amount spent on power, education, medical relief, roads and transport, etc., will have to be added to the two sectors in the proportion in which these services are made available to them. No statistics relating to investments in those spheres, however, except power are available to us. The following table shows that in 1974-75, only 12.31 per cent of electric energy produced in the country was utilised by agriculture as compared with 65.69 per cent that was utilised by industries:

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It will not be out of place to give here some specific examples of where our desire to 'catch up with West' has led the country to.

Although steel production at the end of the fourth plan was about the same as at the beginning - at least 30 per cent below the existing capacity - still, if all would have gone well, the Planning Commission proposed to spend a staggering sum of Rs. 2800 crores during 1974-79 to expand the existing steel plants or put up new ones. They earmarked a sum of Rs. 450 crores, for instance, for "preliminary work" on the Rs. 753 crores Vijayanagaram (Andhra Pradesh) project and Rs. 747 crores Visakhapatnam (Tamil Nadu) plant in the Fifth Plan. They knew that the two schemes could only produce high-cost steel and could have never have paid their way. In fact, they would have incurred a perpetual loss of at least Rs. 125 crores a year on completion, even if their capacity was utilized cent per cent.

More than the public sector investments, however, it is the private sector investments in agriculture that impinge on it much more directly. But as statistics will prove, the agricultural part of private sector investments which are still routed mostly through agriculturist money-lenders, cooperatives, professional money-lenders,

-:51:-

Consumption of electricity by class
of utilization: 1950 to 1974-75

(Million KWH)

Year	Domestic	Commercial	Traction	Industrial	Public light- ing	Agricul- tural pump- sets	Water Works	Misc- ellaneous	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1950	525 (9.38)	309 (5.49)	308 (5.48)	4073 (72.39)	60 (1.07)	162 (2.88)	189 (3.36)	-	5625 (100)
1955	855 (9.14)	514 (5.53)	403 (4.34)	6882 (74.04)	106 (1.14)	255 (2.74)	285 (3.07)	-	9296 (100)
1960 - 61	1492 (8.70)	848 (4.95)	454 (2.65)	12883 (75.17)	193 (1.13)	833 (4.86)	436 (2.54)	-	17139 (100)
1965 - 66	2355 (7.70)	1650 (5.40)	1057 (3.46)	22711 (74.29)	280 (0.92)	1892 (6.19)	625 (2.04)	-	30570 (100)
1970 - 71	3840 (7.82)	2573 (5.24)	1364 (2.78)	34963 (71.19)	500 (1.02)	4470 (9.10)	1016 (2.07)	382 (0.78)	49108 (100)
1974 - 75	5168 (8.73)	3210 (5.43)	1621 (2.74)	38356 (65.69)	506 (0.85)	7579 (12.81)	1213 (2.05)	1007 (1.70)	59155 (100)

Note :- The figure in brackets represent the percentage share of the particular class in the total consumption of electricity in the relevant year.

Source :- Basic Statistics Relating to the Indian Economy (Various Issues) issued by the Central Statistical Organization, Department of Statistics, Ministry of Planning, Government of India, New Delhi.

relatives, traders and commission agents, landlords, commercial banks and others - expressed as a percentage of the total private sector investments - tended downwards from 20.2% in the Fourth Plan to 19.5% in the Third Plan and to 17.8% in the Fourth Plan. So that in private sector investments, too, agriculture gets a back seat. Owing to official policy, manufacturing industry receives a pampered treatment in both the sectors.

Next to research or technological innovations, preservation of the farmer's incentive is the most decisive pre-condition for increasing agricultural production. But here, too, that is, as in the matter of adequate financial outlays for agriculture, Government has failed miserably in assessing the realities of the situation. Its policy of supplying cheap food to the urban population and deficit areas has served to depress production rather than increase it.

There is a wide-spread belief in urban and government quarters that farmers should have no reason to complain if they receive for their produce a price that covers costs and brings a "reasonable" profit. This is the basis on which the Agricultural Prices Commission (APC) operates when recommending prices for agricultural produce. The instances, quoted above, of the reaction of wheat farmers to price changes show however, that what farmers take note

of, is relative prices and profit. If the cost plus formula should yield less profit in wheat than in other crops, then, like other prudent businessmen, the farmers would divert - as they are entitled to divert, the existing acreage under wheat to those under other crops.

The argument is often advanced on behalf of government and also the town-dwellers that a higher price paid to the farmers, would lead to inflation.

But the Government's argument suffers from a common fallacy of confusing cause with effect: higher food prices in themselves have been largely caused by rise in prices which in its turn, is the effect of disproportionate increase in money supply that government has pumped or continues to pump into the economy.

It is submitted that, the times of scarcity, only a scheme providing for (a) compulsory procurement of a part, on a graduated scale, but in no case more than, say, 60 per cent of the possible or estimated surplus production from comparatively large farmers alone, say, those who possess more than three hectares or 7.5 acres, at a parity price, leaving the balance with them and whatever the small farmers who are exempted, might be able to spare, to be handled by the trade, and (b) supply of food not to the entire population of urban areas, but only to such of them whose incomes fall below the national average or average of the particular State concerned, at rates which may, if necessary, be subsidized by government, will meet the ends of the situation.

NEGLECT OF THE VILLAGE AND AGRICULTURE:
ITS CAUSES

The living standard or the per capita income of the rural sector as a whole, compared with the urban sector, has greatly deteriorated since 1947. The gulf between the two is now far wider than what it was at the time when the foreigner left our shores.

In this connection, however, the writer is handicapped by the fact that while the figures of rural and urban population are available as also those of incomes of the agricultural and non-agricultural sectors as a whole, figures of income of the non-agricultural section of the rural population (as also those of the agricultural section of the urban population) are not forthcoming. So, one will have to content oneself with comparing the figures of agricultural and non-agricultural incomes as a whole. But this will serve our purpose fairly well. For, the agriculturists that is, the farmers and agricultural labourers together form the overwhelming percentage of the village and the income of the non-agriculturists composed of artisans and other servants of the village society are governed almost wholly by the agricultural income of the village.

Using the annual figures of agricultural population projected on the basis of FAO figures for 1950, 1960 and 1970, and the ESO (Central Statistical Organisation, Govt. of India) of income one arrives at the following table:

-:56:-

TRENDS IN NET DOMESTIC PRODUCT (NDP) 1950-51 to 1974-75

AGRICULTURE VERSUS REST OF THE ECONOMY
(at constant 1960-61 Prices)

Period	Year	Per capita NDP at 1960-61					(2) as % of (3)		(3) % of (2)	
		Prices (Rs.)		Agri-cultural		Non-Agri-cultural		2/5	3/6	4
		Over all Average	1/4	2/5	3/6	3/6	3/6			
Pre-Plan	1950-51	254.1	204.3 (80.40)	369.2 (145.30)	180.7	55.3	192.5	247.9	297.4	299.9
Annual Average of 1st Plan	1951-56	266.6	210.4 (78.92)	405.0 (151.91)	192.5	52.0	247.9	297.4	299.9	276.6
Annual Average of Second Plan	1957-61	290.9	208.5 (71.67)	516.8 (177.66)	247.9	40.3	297.4	299.9	276.6	283.4
Annual Average of Third Plan	1961-66	319.1	205.9 (64.5)	612.4 (191.9)	297.4	33.6	299.9	276.6	283.4	
Annual average of Annual Plans	1966-69	324.1	201.6 (62.2)	604.6 (186.5)	299.9	33.3	276.6	283.4		
Annual Average of Fourth Plan	1969-74	349.0	220.6 (63.2)	610.2 (174.8)	276.6	36.2	283.4			
Fifth Plan	1974-75	343.3	209.4 (61.0)	593.4 (172.9)	283.4	35.3				

The attitude of the government towards the village is reflected in the discrimination it makes in provision of social amenities like health, housing, transport, power and, above all, education available to the urban and rural areas—discrimination in investment in the human factor in the town and the village. Investment in social amenities is, at least, as important as inputs like fertilizers and irrigation in agriculture. When the man behind the plough is not healthy or educated, he cannot make efficient use of these inputs.

As for supply of clean drinking water, on the eve of the Fifth Plan, while 85 per cent of the urban population had piped water supply, 1.16 lakh villages with a population of 61 millions did not have the most elementary water supply system. In 90,000 villages out of these, there is no water within a radius of one mile. * * *

Not only are the villages starved of energy, but there is discrimination in the cost of energy also charged from the farmers as compared to industries. To take the case of Uttar Pradesh: * * *

Year	Actual cost/unit for industry (in paise)	Actual cost/unit for agriculture (in paise)
1970-71	10.6	15.78
1971-72	10.0	16.68
1972-73	11.8	26.47
1973-74	14.0	29.75

Further, as against the cost of 14.0 paise per unit consumed in industry as a whole and that of 29.75 paise per unit for agriculture on agreement was recently entered into between the U.P. Government and the firm HINDALCO of Birlas under which it was to be supplied 30 megawatts of energy at the cost of 10.5 paise per unit. It will not be out of place to mention here that formerly the price charged from the Birlas since 1961 stood at 2 paise per unit only. Above it all, every cultivator who has put up a tube-well of his own, has to pay Rs. 180 per H.P. per year whether he actually receives any energy or not. This pushes the cost of energy to the farmer still higher.

Education opens up the mind of a person as nothing else does. It is now generally recognised that education rather than being an effect of economic development, is a condition for it, and this would also be true for the agricultural sector. But as in other spheres, an urban bias is noticeable in education also. Rural areas of our country lack in educational facilities even of the primary and the secondary standard as compared to the urban areas. According to the census report of 1971, the figures of literacy for the rural and urban areas stood at 23.74 and 52.49 per cent respectively.

So far as higher technical education is concerned, a study of the socio-economic background of students in

twelve colleges and institutions of professional training covering six professions, viz., architecture, engineering, law, management, medicine and social work by Baldev R. Sharma, published in the February 28, 1976 issue of the Economic and Political Weekly, Bombay reaches the conclusion that "in a country which is still predominantly rural, the representation of rural students in the selected professions is to the extent of only 13 per cent whereas those from urban areas are grossly over-represented":

Background	Number	Per cent
Village	218	13.08
Town (less than 1 lakh)	268	16.01
City (1 lakh or more)	1159	69.24
Not ascertained	28	1.67
Total	1674	100.00

Less than two per cent of the fathers of the students were in blue collar occupations; only 11 per cent were in agriculture; and just six per cent were doing clerical work, including salesman. Altogether, only one-fifth of the fathers were in these three categories of work. As against this, 72 per cent of the fathers were either holding supervisory and executive positions in industry and government or were self-employed professionals. As many as 59 per cent of the fathers were senior government officers, businessmen or professionals.

In the main, however, neglect of agriculture (and, therefore, of the village) is traceable to the urban origin or urban orientation of our ruling class. In fact, the ideology of a man is largely governed by his social origin—the home and surroundings in which he is born and grows up.

Inasmuch as political leadership of the country lives remote from the nature and needs of the village, economic policy made by it, is to a large extent made consciously or un-consciously for the town. According to Mr. Satish K. Arora, "over the decade of 1962-72, the 20 per cent of India that is urban, contributed slightly more than half of all Cabinet Ministers at the Centre; and of these, almost two-thirds were from cities with over 10,00,000 population. The proportion of agriculturists has remained fairly constant at about 17 per cent."*

Ministers from the towns sitting in New Delhi could not possibly know how the villager's mind works - how the village society functions. So, while they may have an intellectual sympathy for the rural folk, they have no personal knowledge or psychological appreciation of the

* An article, Social Background of the Indian Cabinet published in the Economic and Political Weekly, Special Number, August, 1972.

needs, problems and handicaps of the farming community. The problem of land is a closed book to them.

In the West the urban complexion of the political leadership or the administration is not very material inasmuch as the rural sector forms a very small part of their economy and also because in some countries, e.g., the USA, they have laid down as unwritten rule that the Minister of Agriculture shall be a person who comes from the agricultural class. Further, famine is not a near threat there as it is in India.

It would appear from an article written by Shri R.K. Trivedi and Dr. D.N. Rao in the journal of the National Academy of Administration, Mussorie, dated July, 1961 that only 143 out of 1291 (or 12 per cent) IAS officers that there were in the country at the time, were born in the home of an agriculturist. Passage of time has made little or no difference in recruitment to this cadre. In 1974, the percentage of agriculturists recruited to IAS rose to 14. There is no reason to suppose that the proportion is higher in other services either.

According to a survey conducted by the Union Public Service Commission, only 50 out of a total of 165 successful candidates for the IAS and IFS in 1975, were from rural

areas as a whole, that is including both having agricultural or non-agricultural backgrounds, which means that a young man of urban origin had more than 9 times the chances of entering the higher services compared to his compeer from the villages.

On the basis of a comprehensive study of higher civil servants in India, Subramaniam* concluded that a majority (80 per cent or more) of them came from the urban salaried and professional middle class. On the other hand, the farmers and agricultural labourers were found to be grossly under-represented in all the central services, even more than the artisans and the industrial workers. "These findings are significant" points out Baldev R. Sharma, "not only because of the broad scope of this study but also because it deals with central government services that operate under at least two policy constraints - one which specifies a recruitment quota for members of the economically deprived Scheduled Castes and Scheduled Tribes and the other which seeks to establish democratic socialism in India."**

* V. Subramaniam, "Social Background of India's Administrators", New Delhi: Government of India, Publications Division, 1971.

** Vide Economic and Political weekly, Bombay, Feb., 28, 1976.

It is in this structure of the bureaucracy that one may largely look for unimaginativeness of government's schemes having to do with, or meant for welfare, particularly, of the rural masses and, even if the schemes are realistic, then, for their failure or half-hearted implementation.

There is a sinister development in this connection which the reader will please do well to note. New recruits to the higher ranks of services are drawn in an increasing proportion from the present bureaucracy itself. So that the new entrant to the superior services is often the scion of a member of these very services. It has already been pointed out, only a few pages back, that professional students were typically sons and daughters of persons holding supervisory and executive positions in government or industry/of self-employed professionals and businessmen. Which means that the present bureaucracy is fast developing into a hereditary caste, and the doors of the higher echelons of government employment are virtually closed to the sons of those who are outside the charmed circle today, particularly the villagers.

This is not to dispute the ability or sincerity of political leaders or administrators coming from non-agriculturist families. It only means there is little

or no correspondence between the values and interests of the political leader and the administrator, on one hand, and of those who affairs they are called upon to administer, on the other. A man's opinions are, to a great extent, dictated by the source of income of his family and by his surroundings. His parents, his environment, his business, his friends, acquaintances and relatives - it is the sum total of these things that determines a man's outlook on life. Education makes very little difference, if any, to a man's outlook and opinion thus formed: it rather tends to confirm them.

Despite his genuine concern for the plight of the dumb millions in the country-side, Nehru accepted an industry - based model of economic growth recommended by foreign economists. Unlike Chairman Mao Tse-Tung, he did not develop an independent approach to India's problems. The explanation is not far to seek: unlike Chairman Mao, Nehru was the product of an urban environment and western education.

INDUSTRIAL PATTERN

There is certainly no prospect that incomes and levels of living can be substantially improved, or even that deterioration in standards that threatens us if it has not actually set in, can be checked or reversed, in the long run, unless a much larger proportion of the labour force can be effectively employed outside agriculture, that is, in the industry and service sectors of the economy.

Man's wants other than food are so numerous and so diverse that virtually no limit can be placed on use or consumption of manufactured goods and utilization of social services. Nor is there any serious limiting factor in the industry and service sectors, analogous to the availability of land in agriculture which will impede the realization of increasing returns. There is, therefore, no limit to the amount of non-agricultural resources and number of opportunities that a country, and for the matter of that, India may need or choose to create and thus, no limit to the number of persons that can be employed in non-agricultural occupations. So that development of non-agricultural resources is necessary not only as a means of raising our standard of living but also as a source employment.

The question is what kind of industrial pattern shall

we adopt or should we have adopted on attainment of political independence in 1947.

Now, there are two points of view or schools of thought as to how we will or should have set about developing our economy - the one represented by Mahatma Gandhi, the zeitgeist of India's Political awakening, and the other by his own 'heir' Pt. Jawahar Lal Nehru, the first Prime Minister of free India.

From the day Mahatma Gandhi entered the public life of India, he had been advocating the use and encouragement of cottage industries in the country. He said India lived in the villages, not in the cities of Delhi, Bombay or Calcutta. The villagers were poor because most of them were under-employed or unemployed. They have to be given productive employment - employment such as will add to the wealth of the nation. In the circumstances of the country which had such vast manpower and comparatively little land and other natural resources, he argued, it could only be cottage industry which required little or nominal capital, that could provide the needed employment and otherwise answer our needs best, not capital-intensive, mechanised industry based on the Western model or economic growth which would only add to employment and concentrate wealth in the hands of a few, and thus usher in capitalism with all its abuses. The Charkha or the spinning wheel which is associated with his name,

was only a representative of all kinds of handicrafts and cottage industry.

We shall here quote an interview which makes Gandhi Ji's attitude to machinery quite clear.

Voicing his unqualified preference for decentralized production through small units, he once said: "Instead of production by the fewest possible hands through the aid of highly complicated machinery at a particular centre, I would have individual production in people's own homes multiplied by a million of times."

The clear principle that he would have liked India to follow, was that heavy or capital-intensive industry shall be established only for production of goods which could not be manufactured, and large-scale mechanized projects undertaken only for purposes which could not be carried out by human labour on a small or cottage scale.

His views are finally summed up as follows in his own words:

"If I can convert the country to my point of view, the social order of the future will be based predominantly on the Charkha and all it implies. It will include every-thing that promotes the well-being of the villagers. I do visualise electricity, ship-building, iron works, machine-making and the like existing side by side with village handicrafts. But the order of dependence will be reversed. Hitherto, the industrialisation

has been so planned as to destroy the villages and the village crafts. In the state of the future it will subserve the villages and their crafts. I do not share the socialist belief that centralization of the necessities of life will conduce to the common welfare, that is, when the centralised industries are planned and owned by the state.*

Pt. Nehru was, on the other hand, personally in favour of the development of large scale industries. The picture which he had in mind is best reflected in the speech he made before the National Development Council in January 1956. The relevant portion of it is quoted below:

"What I object to is the craze for machinery not machinery as such. The craze is for what they call labour-saving machinery. Men go on 'saving labour' till thousands are without work and thrown on the open streets to die of starvation. I want to save time and labour not for a fraction of mankind, but for all; I want the concentration of wealth not in the hands of a few, but in the hands of all. Today, machinery merely helps a few to ride on the back of millions. The impetus behind it all is not the philanthropy to save labour, but greed. It is against this constitution of things that I am fighting with all my might."

- Q. When logically worked out, that would seem to imply that all complicated power-driven machinery should go.
- A. It might have to go but I must make one thing clear. The supreme consideration is man. The machine should not tend to make atrophied the limbs of man. For instance, I would make intelligent exceptions. Take the case of the Singer Sewing Machine. It is one of the few useful things ever invented."*

* Why the Constructive Programme? Published by the Indian National Congress, New Delhi, 1948, page 19.

In fact, he was prepared to have heavy industry for manufacturing all kinds of implements, instruments or machinery which did not deprive the masses of an opportunity to labour, but helped the individual ease his effort and added to his efficiency without making him its slave - which helped "save individual labour and lighten the burden of millions of cottages."

These concessions in favour of heavy industry however, did not detract from the place which cottage industry held or continued to hold in Gandhi Ji's scheme of things. For shortage of capital and redundancy of labour, he argued, our economy will need to be carried on predominantly in the form of handicrafts or on a small scale dispersed over the countryside.

"In the meeting of the Standing Committee ... greater stress was laid on the heavy machine-making industry being encouraged, as it was said to be the basis of industrial growth. If you do not do that, then naturally industrial growth is delayed. There is one approach which has sometimes been put forward that you should build up your consumer goods industries and gradually save money thereby, and build up something else, thereby getting some more employment. That, I believe, from the point of view of planning is a discarded theory completely. Of course, it does some

good here and there; I would not enter into the details but this approach is not a planned approach at all. If you want India to industrialize and to go ahead, as we must, as is essential, then you must industrialize and not putter about with old little factories producing hair oil and the like - it is totally immaterial what the things are, whether they are small or big consumer articles. You must go to the root and the base and build up the structure of industrial growth. Therefore, it is the heavy industries that count; nothing else counts, excepting as a balancing factor, which is, of course, important. We want planning for heavy-machine-making industries and heavy industries, we want industries that will make heavy machines and we should set about them as rapidly as possible because it takes time".

In April 1956 Government laid down by way of a formal resolution, known as the Industrial Policy Resolution that in order to realise the objective of "a socialistic pattern of society", it is essential to accelerate the rate of economic growth and to speed up industrialisation and, in particular, to develop heavy industries and machine making industries, to expand the "public sector", and to build up a large and growing cooperative sector. This resolution was embodied in the Second Five Year Plan.

Jawahar Lal Nehru made his position very clear in a speech delivered at the meeting of the All-India Congress Committee held in Chandigarh on September 28, 1959, Nehru said:

"The primary thing about an integrated plan was production and not employment. Employment was important, but it was utterly unimportant in the context of production. It followed production and not preceded production. And production would only go up by better techniques which meant modern methods"*.

In the long run -- it was assumed by Nehru and his advisers -- the rate of industrialisation and the growth of national economy would depend on the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals, and the heavy industries generally which would increase the capacity for capital formation. It is true, heavy industries required large amounts of capital and a long gestation period, but - the argument ran - without them India would continue importing not only producer goods, but even essential consumer goods which will hamper accumulation of capital within the country. The heavy industries must, therefore, be expanded with all possible speed. That is why all the Five-Year Plans except the First, were based on the premise that heavy

industry was fundamental to rapid growth, that its expansion largely determined the pace at which the economy could become self-reliant and self-generating and that it would in turn, stimulate the growth of medium and small-scale industry, producing its components and utilizing its products, and thus ultimately provide a larger employment potential. The strategy governing planning in India was to industrialise the country at the earliest and that meant the basic heavy industries being given the first place.

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CONDITIONS FOR CAPITAL INTENSIVE INDUSTRIES
NON-EXISTENT

The school of thought which was opposed to Nehru's views had pleaded that the Western model of development which he wanted to copy, required large capital investment per worker which was, and is not practicable in India.

The quantity and quality of land and other natural resources being fixed with a growing population, income or output per head will ordinarily rise only if the rate of growth of capital, or of improvements in technology, or of both combined, is not only greater, but far greater than the rate of growth in population -- it being assumed that the working force is imbued with a desire for material prosperity and works hard to that end.

So that it is the rate of saving or accumulation of capital, in other words, capital formation or the net rate of investment in the economy that is the primary determinant of economic growth. Saving is the difference between income and expenditure and may be held in the form of cash or bank deposits. When these savings are invested, i.e. used to construct a building, a factory or develop a farm, we have capital formation. Theoretically, capital formation may include additions to stocks.

Of the two domestic sources of capital available, voluntary savings and taxes, we are here concerned only

with the first.

Savings are, to state it in a homely way, the difference between what one earns and what one eats. In a country with a dense agrarian economy, however, where incomes are low and levels of consumption are close to the subsistence level, where the bulk of the aggregate money income of the population is spent on food and relatively primitive items of clothing and household necessities - an increase in savings is not easy to achieve. Private consumption in 1973-74 was of the order of Rs. 43,062 crores at current prices which amounted to 75 per cent of the gross national product, the food items alone accounting for 65 per cent of the consumption basket. And as bare necessities are met, on one hand, further increase are made to population, on the other -- so that the supply of necessities must be constantly expanded. This leads to a situation which makes it hard to accumulate surplus or capital in any substantial quantity.

The Planning Commission's projections of the investment needed to generate one rupee's worth of extra output have gone hopelessly away. The First Plan had assumed an incremental capital output ratio of 3 to 1. Thanks mainly to excellent harvests and the cutting down of forests to extend the area under cultivation (the loss of timber and the ecological damage were, of course, never taken into

account), the actual ratio turned out to be 1.88 to 1. For the second Plan the planners postulated a ratio of 2.3 to 1, and for the Third and Fourth Plan they expected it to be 2.62 : 1 and 3.36 : 1 respectively. All these projections turned out to be wildly optimistic. The actual ratios proved to be more than twice as high during the Second, Third and Fourth Plans.

Now, assuming that the capital-output ratio can be reduced to 4:1 in the future, and the population growth rate can be brought down from the present figure of 2.5 per cent per annum to 2.25, just to maintain the present standard of living we need to make an investment of $(2.25 \times 4 = 9.0$ per cent of the national income annually. So that an increase of 1 per cent of output per head will require an additional investment of (Rs. 9.0 + Rs4.0 =) 13.0 per cent in all, and an increase of 2 per cent an investment of 17.0 per cent will take a period of 51 years to double our present standard of living! Whereas the ratio of savings to national income came to 5.0 per cent in 1950-51, 6.3 per cent in 1955-56, 8.5 per cent in 1960-61, 4.1 per cent in 1965-66 and 4.8 per cent in 1971-72.

It is this hard, irrefutable fact of low rate of savings arising out of the ratio between our huge population (with its potential growth), on the one hand, and natural resources, on the other, coupled with the disquality of our human

factor, that advocates of high capital-intensive enterprises or heavy industries have over-looked and makes them wrong and those of low capital-intensive, decentralised industries, right.

Leaving out the tiny territories like Ireland, Puerto Rico and Libyan Arab Republic, with a respective population in mid 1973, of 3030, 2950 and 2119 thousand, there are, according to the World Bank Atlas, 1975, only twenty-two countries in the world having a per capita GNP of more than \$ 2000 each. Now, inasmuch as the percentage of the working force engaged in agriculture exceeds a quarter of the total in the USSR (32) and Poland (38). They cannot qualify for inclusion in the category of economically developed countries despite their sufficiently high GNP.

Of the remaining twenty developed countries two, viz., Democratic Republic of Germany and Czechoslovakia, were parts of Germany only 30 years ago and had attained great economic progress before they were sucked into the Communist camp. So that we are left only with eighteen countries whose mode of economic development has to be studied. Of these, barring Israel and Switzerland, sixteen can be divided into two categories of eight each, the first, consisting of Netherlands, Belgium, Japan, Germany, the United Kingdom or Britain, Italy, Denmark and France, viz.,

those countries which had little or few natural resources - relative to population density, but had grabbed colonies and dependencies, thus making up for lack of resources at home.

The second category consisted of Austria, Norway, Sweden, the United States of America, New Zealand, Finland, Canada and Australia, that is, countries which had comparatively high physical resources relative to population density (and, therefore, no need or excuse to seize other lands). Their own resources not only produced raw materials that fed the factories, but also food the quantities that left a surplus over rural requirements, to feed industrial workers and those engaged in capital formation.

None of the other countries including the USSR (with a per capita gross product of \$ 2030 only), can be regarded as fully developed or economically advanced. All of them excepting Korea, Pakistan, Ceylon and India enjoy the advantage of a high land or natural resources: man ratio, yet, they have not been able to make the grade: they have not reached the height of living standard or per capita income justified by their natural resources. The main reason lies ultimately in the disquality of their human factor as contrasted with the quality of the human factor in the developed countries (which, inter-alia led to some

of them acquiring foreign territories). There is yet another reason in the case of the USSR, viz., the release of workers from its agriculture is hampered because of low productivity of the collective farms into which the peasantry was forced by the communists against its will.

The four countries immediately mentioned above, suffer both from paucity of resources and disquality of their people. Though not yet an advanced country, Korea, however, has made good progress recently.

To return to India with whose progress alone we are concerned, here: The opportunities that were able to the advanced countries like Netherlands and others (included in the first category) mentioned above, are not available to us. Ethics of the matter apart, there are no colonies or dependencies to exploit, any longer. We have arrived on the world stage at a point of time when people and resources of other lands cannot possibly be exploited, even if we would. Also, all under-developed countries are trying to make up the lee-way so that, soon, there will be left few or no external markets to exploit or to buy our industrial goods.

Perhaps, the western path of development would have been open to India if it had begun to industrialize in earnest a hundred years ago when the combined population

of the subcontinent was no more than 200 million, the death rate was high and the rate of population growth less than half a per cent per year and industry itself was not, by today's standards, very capital-intensive. But today it is decisively closed. We cannot spare or accumulate capital to the amount that heavy industry requires nor can heavy industry find employment for the huge population that India carries today.

Obviously, the USSR does not offer an example which India could usefully initiate: in given circumstances, communism is far less efficient than capitalism in raising production. Nor is there any question of taking lessons from China either. If under the sign of communism, the USSR could not significantly raise the living standard of its people despite its vast resources, China with comparatively little resources could not possibly hope to do so. Although no reliable information is available, yet if it is a success story in comparison with India or its people are better fed and clothed than Indians, then, one of the reasons may be that it has taken more than a leaf from Gandhiji's teachings. Various reports from unimpeachable sources indicate that not only had Mao Tse-tung given first priority to agriculture since 1962, but had relied greatly on human labour and decentralised labour-intensive enterprises in building his country

than on large-scale, mechanised projects and industries.

Thus, we arrive at the irrefutable conclusion that capital in a measure required for a capital-intensive structure in India could not be had, at least, rapidly through domestic savings, whether under a democratic or communistic set-up.

There was a source of capital, however, to which we could look for assistance, viz., the international market. The justification for this course has thus been spelt out by Western economists, Ranger Nurske and Arthur Lewis among them: Poor countries are caught in a vicious circle. Because their incomes are low, savings were low; because savings were low, investment was low; because investment was low, productivity was low; because productivity was low, incomes were low. So, India could not and, for that reason, no poor country could raise itself in a reasonable period, by its own bootstraps. The vicious circle, it was argued, in which the country finds itself caught, could not be broken -- India's substantial development could not proceed -- without massive foreign aid.

Nehru fell in for these arguments despite the advice of many an economist and well-wisher of the country to the contrary.

There was another course open, viz., as advised by

the Mahatma, to build up the country slowly and patiently from below on the strength of its own resources. But Nehru would not listen. His heart was bent upon establishment of an industrial structure on the lines of the USA and the USSR and, to that end, he decided to go hammer and tongs, both for foreign capital and foreign technology as also to divert all possible domestic resources to heavy industry even at the cost of food, water, clothing, housing, education and health.

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Socialism and Mixed Economy

Being staunch believers in democracy as adumbrated in the Western literature and, at the same time, fascinated by the goals of the Russian Revolution, a large section of Indian political leadership dreamt of a politico-economic order under which not only nobody will be exploited by another, but everybody will be afforded an opportunity of self-improvement a dream which provided both for democratic freedom and economic equality consistent with rapid economic growth. So, influenced largely by Nehru, they plumped for a compromise between socialism and capitalism - a 'mixed' economy in which material resources of the nation would be owned and worked partly by the state and partly by private citizens, in other words, where the private and the public sector would co-exist. That is why, perhaps, big business men also can afford to believe in or even propound 'Socialism' as a practical policy goal in India.

At its Bhubaneshwar Session in January, 1964, the Congress party defined its objective as "socialist state based on parliamentary democracy".

As every public man in India knows, the lure of socialism was formally started at the Avadi Session of the Congress in January, 1955, but the Congress leaders do not yet seem to know what exactly they have in mind. Nehru himself, through all his years of office, was never willing nor able to indicate the precise path or paths along which he would lead the country to the objective which he had set before it.

In view of the need to conciliate public opinion, the New Congress (led by Prime Minister Indira Gandhi), made a categorical declaration in its election manifesto issued in January, 1971, that, subject to measures which will serve to prevent concentration of economic power and wealth in a few hands, "it has no intention of abolishing the institution of private property". On the other hand in order to emphasize the "socialist" character of her policies, she declared a year later in Bhubaneswar that "the thinking of the Communists and the Congress was the same" in "domestic and foreign policies".*

Faced, however, by criticism of working of the public sector she has declared at public functions, time and again, that socialism did not mean nationalisation of all industries and that Government would nationalise a particular industry only when it was essential. In Gandhinagar (Gujarat) on October 9 and 10, 1972, she is reported to have exploded the myth, as the press put it, that "nationalisation by itself was a socialistic step".

Whereas, while Gandhi Ji was clear in his mind that the minimum number of large-scale projects or Industries that are inevitable, must be either owned or controlled by the state, he went on record to say :

"What I would personally prefer would be not centralization of power in the hands of the state but an extension of the sense of trusteeship as in my opinion the violence of private ownership is less injurious than the violence of the state. However, if it is unavoidable I would support a minimum of state ownership".

(Vide "An Interview with Gandhi Ji" Modern Review, Oct., 1935).

* Vide the Times of India, dated Feb. 10, 1974.

What Gandhi Ji thought of socialism as a system where property is owned by the state, will be clear from the fact that he had warned the country against the state developing into a leviathan : "Self-government means a continuous effort to be independent of Government control whether it is foreign Government or whether it is national. Swarajya Government will be a sorry affair if the people look up to it for the regulation of every details of life.

"A nation that runs its affairs smoothly and effectively without much state interference, is truly democratic. Where such condition is absent, the form of Government is democratic only in name.

"I look upon an increase in the power of the state with the greatest fear because although while apparently doing good by minimising exploitation, it does the greatest harm by destroying individuality which lies at the root of all progress".

Planning from the top down, which socialism necessarily involves, undermines freedom because it required people to obey orders rather than pursue their own judgment. Further, it is inefficient because it makes impossible the use of the detailed knowledge stored among millions of individuals. Whereas planning from the bottom up, which the economy of Gandhi Ji's conception implied, enlists the interests of each in promoting the well-being of all and, thus, subserves true democracy.

PUBLIC SECTOR

The demand for public ownership of factories and other means of production in mid-nineteenth century in pursuit of socialism, was raised mainly in order to put an end to exploitation of the workers who possessed no right of vote, no right to strike, no right to form an association and no safeguard at all against arbitrary dismissal. Also, it was thought public ownership of the factory will raise the status of the workers and usher a more democratic and egalitarian society than at present. Further, a factory will be administered more efficiently once it was operated by the state in public good than previously when it was managed by a capitalist in his own interest.

Now, so far as the first objective was concerned, it is no longer relevant. The prophecy of Karl Marx regarding increasing proletarianisation of the industrial workers has not come true. Whatever else may have or may not have overtaken the conventional working class in the capitalist countries, liberal capitalism has been able to afford a flow of consumer goods so substantial and steady as to assign conditions of popular poverty to the limbo of an age as different to the present as the one that upheld the divine right of kings.

Abolition of private property alone, which the public sector or socialism implied, could not possibly lead to an end of the worker's exploitation. The problem of checking the bureaucracy remained and, because human conduct is involved, shows little or no signs of solution. If labour relations in

many of the big public projects in the country are so messy, it is because the hierarchy of bureaucratic power is far too remote from the worker. The hope that Government by its ideal behaviour would act as a model for the private sector to follow, has been completely belied.

Public ownership or nationalisation has not given the worker a new status nor has it been accompanied by a strengthening of the worker's identification with the plant or with the job to be done. Even with the support of powerful trade unions in all the nationalised industries, the individual employee continues to feel that he has no real control over most of the circumstances of his working life, and has merely been transferred from one set of bosses to another.

As regards bringing about of a more egalitarian society and the curbing of private monopolies which was sought to be achieved through public ownership, it was discovered that the objective could be achieved by other methods, such as taxation, price control, quality requirements, social legislation like old age pensions, sickness benefits, etc. etc. and the countervailing power of trade unions. In the UK and the USA the gap between the rich and the poor has been greatly narrowed during the last quarter of a century by resorting to these methods. Whereas in India where 60 per cent of the industrial capacity is now owned by the state, the gap has greatly widened.

EXTRACTS FROM CHAPTER 5 OF CAPITAL
INTENSIFIED INDUSTRIES AND ITS
CONSEQUENCES.

PUBLIC SECTOR

As on March 31, 1976 there were 140 Central Government public undertakings. Of these 8 are under construction, 7 are insurance corporations, 3 are registered under section 25 of the Company's Act, 42 are service enterprises and the remaining 79 are engaged in production. The number of such units and the growth of investment in them, since the commencement of the First Five Year Plan is shown in the table below :-

PERIOD	TOTAL INVESTMENT (Rs. CRORES)	No. OF UNITS
At the commencement of the First Plan	29	5
At the commencement of the Second Plan	81	21
At the commencement of the Third Plan	953	48
At the end of the Third Plan (As on 31st March, 1966)	2415	74
As on 31 March, 1967	2841	77
As on 31 March, 1968	3333	83
As on 31 March, 1969	3902	85
As on 31 March, 1970	4301	91
As on 31 March, 1971	4692	97
As on 31 March, 1972	5052	101
As on 31 March, 1973	5571	22
As on 31 March, 1974	6237	122
As on 31 March, 1975	7261	129
As on 31 March, 1976	8973	129

As on March, 1976 the investment on state-owned public undertakings stood at a figure of Rs.8973 crores nearly half of the country's total investment in organised industry. If one excludes the Rs.400 crores allotted for the Kudremukh iron

ore project, which is being financed entirely out of Iranian credits, the proposed steel outlay of Rs.1,209 crores (inclusive of Kudremukh) for 1977-78 and 1978-79 would make for a total fifth Plan steel investment of Rs.1,807 crores. If the amount outstanding (Rs.2023 crores) under the Cash credit arrangements is included, the amount would swell to Rs.10996. Out of this, the Steel Authority of India, Hindustan Steel Limited and Bokaro Steel Limited accounted for an investment of around Rs.2570 crores. This constituted about 28.6 per cent of total investment in public sector. Of this, a little over Rs.2300 crores accounted for by Hindustan Steel and Bokaro Including Rs. 872 crores during the Fourth Plan Period Above.

Corrupt payments, idle capacities and inefficiency have impinged directly on costs of the public sector and, hence, on its returns. A substantial part of the investments which may vary from 20 to 40 per cent, depending on the projects and the parties concerned, shown in the account books, gets converted into private incomes via corrupt payments. Actual investments, therefore, are less than those shown in the ledgers, by the amount of the corrupt payments of what are called 'kick-back'. Second, part of the actual investments i.e. the investments remaining after conversion of a portion into corrupt payments gets immobilized in idle production capacities. While these investments remain idle, the investment resources they embody are, a waste. Third, wastages of raw materials and accessories, over-staffing, inefficient maintenance of plant and equipment, etc. have impinged adversely

on costs, quality, and the quantum of output.

With the result that the value added per unit of fixed capital investment in the public sector factories is the lowest - one sixth of that in the private sector factories. Figures shown in columns 2 and 3 of the following table have been taken from the Government of India publication, Annual Survey of Industries, 1970:-

Type of ownership	Fixed capital per employee (Rs.)	Value added per employee (Rs.)	Value added capital investment (cd. 3/col. 2)
1	2	3	4
Public Sector	48923	6146	0.125
Joint Sector	27490	7592	0.276
Private Sector	9256	6927	0.748
All Sectors	19656	6762	0.344

contd...

FOREIGN LOANS AND COLLABORATION

Establishment of heavy industry in the public sector, coupled with nationalisation of existing private industry, had led to an unconscionable burden of foreign debt. At the time of granting independence to India on August 15, 1947, Britain had left behind gold, coin and bullion worth Rs. 1180 crores in Reserve Bank plus Rs. 1733 crores of sterling balances, Rs. 425 crores of repatriation pre-war debt and Rs. 115 crores in the Empire Dollar Pool - a sum of Rs. 3452 crores in all. But today although the volume of exports has gone up and remittances of upkeep on foreign rulers have almost ceased, India has become, since Independence, a topmost debtor country.

In 1972 the external debt constituted 20.2 per cent of our national income - the highest of any country for which figures are available.

By 1950-51 all the money left to our credit by the British, had been squandered, and we came to owe a debt of Rs. 32 crores to foreign countries. As the following table will show, the external assistance that we sought and secured during the period 1951-76, amounted to Rs. 17654.6 crores, of which 7.3 per cent or a sum of Rs. 1288.8 crores constituted out right grant. It must be noted that the amount of Rs. 17654.6 crores is exclusive of the loan of two million tonnes of wheat from the USSR in 1972-73, credits secured for financing a part of

the oil imports from Iran and Iraq and a huge sum of PL-480 debt, viz., Rs.1664 crores which was written off by the USA in 1974.

Out of this huge total, a sum of Rs.5425.6 crores had been paid off to the creditors by March, 1975-Rs. 3435.8 crores towards principal and Rs.1989.8 crores towards interest.

TOTAL EXTERNAL ASSISTANCE, SHARE OF
GRANTS DEBTS SERVICING CHARGES AND
NET INFLOW OF ASSISTANCE

(In crores of Rupee)

Period	Total a/ External Assistance	Share of Grants in Total Assistance	Total Debt servicing (Amortisa- tion + Interest Payments b/	Net inflow of Assis- tance
Upto First Plan	317.7	34.8	23.8	293.9
During Second Plan (1956-61)	2252.6	11.2	119.4	2133.2
During Third Plan (1961-66)	4531.0	3.7	542.6	3988.4
1966-67	1131.4	8.6	274.5	856.9
1967-68	1195.6	5.1	333.0	862.6
1968-69	902.6	7.2	375.0	527.6
1969-70	856.3	3.0	412.5	443.8
1970-71	791.4	5.5	450.0	341.4
1971-72	834.1	6.1	479.3	354.8
1972-73	666.2	1.8	507.4	158.8
1973-74	999.3	2.4	595.8	403.5
1974-75	1337.4	7.0	626.0	711.4
1975-76	1839.0	15.4	686.3	1152.7
Total:	17654.6	7.3	5425.6	12229.0

Notes: a/ Amount expressed in foreign currencies have been converted into rupees at the post-devaluation rate of exchange (\$ 1 = Rs.7.50) upto 1970-77. For the year 1971-72, pre-May, 1971 exchange rates have been

retained for conversion into rupees. For 1972-73 the rupee figures have been derived on the basis of the central rates which prevailed following the currency realignment of December, 1971. For 1973-74, the quarterly average of the exchange rate of the rupee with individual donor currency has been applied to the quarterly data in respect of utilisation for arriving at the equivalent rupee figures. For 1974-75 utilisation figures have been worked out at current rates which is the monthly average exchange rate of the rupee with individual donor currencies. Utilisation figures for 1975-76 are based on actual daily rates of the rupee with the donor currency on the respective dates.

b/ These figures relate to payments made in foreign exchange and through export of goods. Conversions in rupee are at the predevaluation rate of exchange (\$ 1 = Rs.4.7619) for the first three Plans and at the post-devaluation rate of exchange (\$ 1 = 7.50) for the subsequent years upto 1970-71. For the year 1971-72, pre-May, 1971 exchange rates have been retained for conversion into rupees of amortisation payments; but central rates have been used for computing the rupee equivalent of interest payments effected between December 20, 1971 and March 31, 1972. For 1972-73, central rates have been used. For 1973-74 the quarterly average of the exchange rate of the rupee with individual donor currency has been applied for arriving at rupee equivalent of repayments of principal and interest from 1974-75 onwards actual daily exchange rates of rupee with the individual donor currency applicable on the respective dates have been used.

c/ During First Plan Period.

S Source:- Economic Survey 1976-77 Tables 7.4 and 7.6 pages 114 and 116.

COLLABORATION

Besides incurring loans - it was argued by some economists - there was another way of utilizing foreign capital, viz., of attracting private investors who may themselves prefer to participate in the establishments of plants and factories in India. In addition to providing employment such factories will make available the technical know-how and managerial skills that we do not possess. At the same time, no question of repayment of capital and its interest will arise, nor any question of political strings being attached. So, foreign investment has been unabashedly invited in the name of "collaboration".

As has already been pointed out, however, Nehru, the Worshiper at the shrine of modern industry - went all out for foreign capital, whether in the form of loans or in the form of investment in India by foreign capitalists. And the apprehensions that were voiced at the time, have come true. Foreign collaboration has simply turned out to be another name for loot of India's financial resources.

On August 29, 1975, Mr. R.S. Bhat, Chairman of the India Investment Centre, boasted at a press conference in New Delhi, that several foreign firms had told him that the guidelines enshrining government's policy in this regard, were "fair and reasonable" and "no other country in the world permitted foreign firms to have an equity share of as much as 74 per cent.

As a result of this policy foreign investors who were prepared to pack up on advent of political independence in the country, decided to stay, and the amount of foreign investment rose from a figure of Rs.260 crores in 1948 to Rs.1611.8 crores in March, 1969.

This, despite the fact that we were supposed to have wrested independence from the exploitation of the British imperialists and given freedom to our people. It would seem today we have not one foreign exploiter, but several who have increased their exploitation tenfold over the last twenty years. The details of private foreign investment are as under:-

FOREIGN INVESTMENT IN INDIA
COUNTRYWISE DISTRIBUTION

		Value : Rs. Million				
Country		As at the end of March				
		1969	1970	1971	1972	1973
		(1)	(2)	(3)	(4)	(5)
1.	U.K.	6,367	6,179	6,175	6,410	6,496
2.	U.S.A.	4,339	4,313	4,567	4,848	5,097
3.	West Germany (FRG)	1,040	1,157	1,196	1,367	1,562
4.	Italy	734	902	911	840	787
5.	Japan	814	713	603	547	493
6.	Switzerland	324	445	463	464	488
7.	France	560	532	481	495	472
8.	Canada	185	206	238	280	298
9.	Sweden	186	188	195	202	205
10.	Other countries	766	962	1,115	1,203	1,183
11.	International Institutions.	878	812	852	901	1,082
TOTAL:-		16,193	16,409	16,796	17,557	18,163

Source:- Reserve Bank of India Bulletin May, 1976

REMITTANCES ABROAD FROM INDIA

Value: Rs. Million

H E A D	1971-72	1972-73
1. Profits	99.4	155.4
2. Dividends	388.7	390.8
3. Royalties	58.6	73.3
4. Technical know-how.	139.0	133.3
5. Interest payment by private sector.	121.3	156.0
	<u>807.0</u>	<u>888.8 or 88.88</u> crores.

As the above table shows, however, in 1971 the Birlas almost caught up with the Tatas. The Birlas group has thus, grown faster than the Tatas.

At the end of 1976 the assets of Birlas were reported to have exceeded Rs. 1065 crores and they occupied the top position amongst the business houses in the private sector. Tatas with total assets of Rs. 975 crores ranked second.

There were as many as 20 large industrial houses each of which had assets exceeding Rs. 100 crores. On an aggregate basis the total assets of all the 20 large houses together expanded from Rs. 3516 crores in 1972-73 to Rs. 4966 crores in 1975-76. This represented an increase of 41.2%

The total annual turnover of these large houses in 1975-76 aggregated to Rs. 5879 crores as against Rs. 3638 crores in crores in 1972-73. The gross profit of these houses increased from Rs. 380 crores in 1972-73 to Rs. 600 crores in 1975-76.

Source:- Economic dated February 14, 1977.

PRIVATE SECTOR

AND

CONCENTRATION OF ECONOMIC POWER

During the most difficult years which the Nation faced through from 1964 to 1974 when there were droughts, food shortages and devaluation and the people's standard of living deteriorated, the 13 biggest monopoly houses almost doubled their assets:-

	Houses Industrial	Rs. Crores		
		March, 1964 (1)	March, 1966 (2)	March 1971 (3)
1.	Tatas	418	505	711
2.	Birlas	293	458	687
3.	ICI	37	51	229
4.	Martin Burn	150	153	173
5.	Mafatlal	46	93	173
6.	Bangur	78	104	150
7.	Thapar	72	99	137
8.	ACC	77	90	123
9.	J.K. Singhania	59	67	113
10.	Walchand	55	81	106
11.	Bird Heligers	60	68	85
12.	Goenka	47	65	79
13.	Kilachand Tulsidas	35	37	44

Source:- For Cols. (1) and (2) Company News and Notes May 1 and 16, 1970 for Col. (3) Reply to question in Parliament.

The assets of the Birlas in the year 1950-51 and 1955-56, had amounted to Rs. 65 and Rs. 159 crores only while those of the Tatas to Rs. 152 and Rs. 389 crores respectively.

create a dual economy - viz.

in a hinterland of poverty, unemployment and stagnation. It has led to concentration of wealth at the top and, in as much as millions upon millions of people are going unemployed and under-employed, to pauperisation at the bottom. Despite their profession of GARIBI HATAO, the policies of the ruling party have resulted in emergence of monopoly houses with their ever-increasing capital stock and mounting profits in contrast to crores upon crores of semi-starved and ill-clad dwellers of hutments in the countryside and slums in the cities. While, on the one hand, tens of thousands wallow in luxury knowing not what to make of their windfalls or ill-gotten gains on the other, tens of millions starve for want of a morsel of bread. True, a wide gulf between the rich and the poor has existed in India through the centuries but, instead of narrowing, it has been accentuated with the advent of Independence quarter of a century ago.

The reasons are simple and not far to seek. First, because of the skills needed to run the large and technologically complex enterprises, managers and engineers command high wages. Second, the more capital-intensive the investment, the smaller is the labour force employed and the

higher its productivity. Their small numbers and concentration in a small area, make it easy for the workers to band together and demand a large share of the products. Employers, whether the State or a private citizen, can afford to raise wages because of the high productivity of such enterprises as well as the heavy penalty that they will have to pay, in terms of output foregone, for any stoppage of work.

A survey has shown that industrial workers in Bombay and other cities in the lower category earn Rs. 360 to Rs. 1400 per month. A truck driver in a large-scale industry today makes considerably more than a college lecturer. The total monthly emoluments of a peon in a Government-owned commercial bank may vary from Rs. 450 to Rs. 600 per month and of a clerk from Rs. 550 to Rs. 1300 per month. As, perhaps, a most revealing example: the Steel Minister, Shri Mohan Kumar Mangalam boasted in the Rajya Sabha on August 25, 1971 that salaries of employees of the Indian Iron and Steel Company which was only recently nationalised had been so upgraded that even a woman sweeper now got Rs. 397 per month.

Government services did not lag behind. The arguments that applied to industrial workers and employees of public enterprises, applied to them also. Further, they had a large say in the result of elections. So they also raised their voice and were promptly heard. Salary increases and

dearness allowances followed yearly and even quarterly.

With the backing of powerful assistance of Central and State Government employees and powerful trade unions respectively, the white collar workers and the organised industrial workers have become a privileged class in a society where hundreds of millions - more than half of the people in any case, eke out an existence below the poverty line.

The limitless prosperity which socialism of the Congress variety has brought to the upper crust of society, is visible to the naked eye - in the change in the style and affluence of their living, in the proliferation of the four and five-star hotels, which are filled to capacity, in the growth of luxury travel facilities, in the overcrowding of the noted holiday resorts, in the multiplication of lavish residences with rich furnishings and the display of wealth at marriages and other social functions. It is evident, too, in the steep rise in the statistics of the production and supply of luxury goods, most of which are well beyond the access of the masses.

It is with a view to meeting the needs of this class overwhelmingly composed of industrial workers and government employees the richest, predominantly urban section of the population, which has adopted a largely western style of living - that much of modern industry has come into existence.

A comparison of figures in the following two tables shows that while the share of top 20 per cent of the people in national incomes in the United States went down from 45.7 per cent in 1950 to 43.0 per cent in 1959 and, in Ceylon, from 53.9 per cent in 1952-53 to 52.3 per cent in 1963, that in India shot up from 42.0 per cent in the four-year period, 1953-57 to 53.3 per cent in the year 1967-68. Further, that, on the other hand, while the share of bottom 20 per cent of the people during the corresponding periods went down in the United States by 4 per cent and, in Ceylon, by 12 per cent only, that in India went down by 40 per cent. It will also be noted that while 10 per cent top people shared only 27.8 per cent of the national income in the U.S.A. in 1959, they shared 36.5 per cent in India in 1967-68. Yet, a virulent propaganda at the official level, condemning the capitalistic policies of the U.S.A. in comparison to the socialistic policies of our own goes on unabashed and unabated:

TABLE

PERCENTAGE SHARES OF ORDINAL GROUPS OF UNITS
(HOUSEHOLDS OR TAX RETURNS) IN PERSONAL INCOME:
SELECTED COUNTRIES*

Countries & Year	SHARES OF ORDINAL GROUPS				
	Bottom 20%	Bottom 60%	Top 20%	Top 10%	Top 5%
Underdeveloped Countries:					
1. India, 1953-54 to 1956-57	8.00	36.00	42.00	28.00	20.00
2. Ceylon, 1952-53	5.1	27.7	53.9	40.6	31.0
3. Mexico, 1957	4.4	21.2	61.4	46.4	37.0
4. Barbados, 1951-52	3.6	27.1	51.6	34.2	22.3

Contd...

5.

Countries & Year	SHARES OF ORDINAL GROUPS				
	Bottom 20%	Bottom 60%	Top 20%	Top 10%	Top 5%
5. Puerto Rico, 1953	5.6	30.3	50.8	32.9	23.4
6. Italy, 1948	6.1	31.2	48.5	34.1	24.1
DEVELOPED COUNTRIES:					
7. United Kingdom, 1951-52	5.4	33.3	44.5	30.2	20.9
8. West Germany, 1950	4.0	29.0	48.0	34.0	23.6
9. The Netherlands, 1950	4.2	29.5	49.0	53.0	24.6
10. Denmark, 1952	3.4	29.5	47.0	30.7	20.1
11. Sweden, 1948	3.2	29.1	46.6	30.3	20.1
12. United States 1950	4.8	32.0	45.7	30.3	20.4

* Vide Reserve Bank of India Bulletin, Sept. 1963, p.1140.

SOURCES:

1. United Nations, National Income and its Distribution in Underdeveloped countries, Statistical Papers, Series E No. 3, New York, 1951, p. 29.
2. United Nations, Economic Commission for Europe, Economic Survey of Europe, 1956, Geneva, 1957, Chapter IX, Table 3, p.6.

Contd...

3. Kuznets, Simon, Quantitative Aspects of the Economic Growth of Nations, VIII, Distribution of Income by Size, Economic Development and Cultural Change, January 1963, Table 3, pp. 13-15.

4. United States Department of Commerce, Income Distribution in the United States, Washington, 1953, Table 21, p.85.

TABLE

Comparison of Distribution of Family Income, Selected Asian Countries, and United States, with India by Income Share of Decile Groups*

Country	Year	Percentage share of total income for each decile group									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
United States	1959	1.3	3.3	5.1	6.7	7.9	9.1	11.1	12.4	15.2	27.8
Japan	1963	3.0	4.7	5.7	7.3	7.9	9.0	10.4	12.0	16.0	24.0
Taiwan	1964	3.0	4.8	5.7	6.9	7.6	8.9	9.8	13.2	13.8	26.3
South Korea	1966	4.0	5.0	7.0	7.0	9.0	9.0	11.0	12.0	15.0	21.0
Phillipines	1965	1.1	2.9	3.0	4.7	5.8	6.9	9.0	11.6	15.0	40.0
Thailand	1962	2.8	2.9	3.1	4.1	5.1	6.8	8.2	9.3	14.7	43.0
Malaya	1957-58										
	58	2.6	3.9	6.1	5.1	7.2	8.5	10.3	12.4	16.1	27.8
Ceylon	1963	1.5	3.0	4.0	5.2	6.3	7.5	9.0	11.2	15.5	36.8
India		1.8	3.0	3.7	4.6	5.8	7.0	9.0	11.8	16.8	36.5
(Present Survey 1967-68)											

Note D₁ denotes the bottom 10 per cent and D₁₀ denotes the top 10 per cent of the households

*Vide Basic Statistics relating to Indian Economy, 1950-51 to 1972-73, Table 10, CSO, Ministry of Planning, Government of India.

SOURCE:

"Income inequality and Economic Growth, The Postwar Experience of Asian Countries", The Malayan Economic Review, Vol. XV, No. 2, October, 1970, p.7.

The Congress Government did not seem to remember the fate and fortune of the vast multitude who have no work and, therefore, no wages or salaries, no bonuses or allowances. Government had allocated Rs. 280 crores to give loans to Government servants for buying vehicles. An allocation of this order over the next five years means actual allocation of Rs. 56 crores a year. It is learnt that in 1970-71 amounted to the tune of Rs. 8.58 crores. In 1971-72 the amount was a little over Rs. 9 crores. More than sixfold increase under this head mystified political observers in the country. Since a scooter costs only a fraction of what costs to buy a car, the bulk of this amount was known to have been advanced for purchase of cars. Till 1973 something between 3,000 to 4,000 cars in all had been bought against Government loans. However, with the new allocation of Rs. 56 crores per annum the Government employees could buy about 30,000 cars a year.

Contd...

Now, we will turn to the worst consequence of heavy industry - first strategy, viz., the increasing unemployment and under-employment which have virtually eaten into the vitals of the nation. Nehru's and his advisers almost mystic faith in the twin gods of technology and heavy industry, has turned out to have been misplaced. Western technology which developed in the West in response to a shortage of labour and the consequent need to replace men with machines, provides no short-cut to prosperity in countries with a surfeit of under-employed and under-nourished labour and an acute shortage of capital.

In reality, there is no conflict between employment and production - between a simultaneous increase in employment and growth of income. Social justice and development, or what is called Gross National Product (GNP) can be combined. But supposing there is, that is, labour-intensive enterprises produce less per unit of capital investment than capital-intensive enterprises which Pt. Nehru advocated, the question arises whether it is productivity of capital alone which will serve to raise average per capita income, that will be the primary consideration irrespective of other circumstances whatsoever. In so far there is any real dilemma (which we do not think there is) it is a question of balancing the loss of those who would otherwise be unemployed against the potential progress of the rest of

the community. In our country where 40 to 50 per cent of the people have been living below the level of desirable minimum for decades, the choice is not difficult to make; we have to raise the income and consumption of those at the bottom of the income distribution, rather than the income and consumption of those above it. Employment of those at the bottom is worth paying the price in terms of slower rise in incomes for the rest of the community.

In agreement with orthodox or traditional economists, however, in the post-Independence era, Pt. Nehru thought that heavy capital-intensive industry led to higher output and, therefore, to higher national income or gross National Product (GNP) and that poverty and unemployment will take care of themselves once we took care of GNP. The argument was that availability of capital was the basic condition to economic growth, that capital intensive industries led to a distribution of incomes favourable to profits or concentration of money in a few hands although this was never admitted in so many words; that the rich having a higher propensity to save, those who will be deriving profits from capital-intensive industries, will accumulate savings; that these savings will necessarily be invested by the savers - the industrialists themselves - in new, large or capital-intensive undertakings of mopped up by Government in the form of taxes in order to establish industries in the public sector, and so on and on till, in the long run, the

economy would have become self-generating, stimulating medium and small industry and creating a vast employment potential. It is thus and why Pt. Jawahar Lal Nehru came to look upon increase in national income as the sumprime target of our planning - why in spite of a number of references in the Plans to the employment problems the creation of employment opportunities was seen more or less as an adjunct to or a by-product of the development strategy. The view taken in the Fourth Plan is a somewhat sharper echo of the views in the earlier Plans. It went on to say that in a poor country like India no significant result can be achieved through re-distributive policies since "whatever surpluses can be mobilised from the higher incomes of the richer classes are needed for investment in the economy to lay the basis for larger consumption in the future". The poor and the weak, therefore, have to be helped through faster growth of the economy and other specific policy measures.

With a view to achieving faster growth capital was subsidized and administrative controls used to accelerate large-scale capital-intensive investment. Employment was relegated to the back seat as a bye-product of the overall growth considered as its bye-product. The initial reaction of most economists - Nehru's advisers - to the employment crisis was to plead for still more of the same type of

investment that does not create enough jobs.

When some economists observed that large firms and large farms use less labour than small ones, other economists countered with the assertion that investment in small producers would slow down the rate of economic growth. Income of labour-intensive undertakings, they argued, would be distributed into so many hands that there will be little or no savings to mobilise and invest. The long-term problems created by a slowing down of growth rates would offset any short-term gains in employment.

But as Prof. Dudley Seers of the University of Sussex who was deputed by the ILO to study the unemployment problem of Colombia had concluded, "to try to solve the unemployment problem by just accelerating the overall economic growth is to take on voluntarily the task of Tantalus - the target recedes as one reaches for it!"

The reasons, inter alia, why our leaders fell in for the modern sector despite Mahatma Gandhi's advice to the contrary, were psychological or ideological: benefits which many of the technical advances had undoubtedly brought to developed countries were so enormous - the glamour of the technical novelty was so dazzling - that it blinded them to what technology as a bye-product was doing to their economy, viz., to its social costs in terms of increasing unemployment and increasing income disparities. They forgot

that their circumstances were different from those of other countries.

So that if even after establishment of Swaraj some thirty years ago, we are faced with continuance of vast misery in our towns and villages throughout the country, on one hand, and emergence of monopolies on the other, it is not an accident but a result of conscious planning.

It was after his policy of giving preference to heavy industry over a long period of 17 years, i.e., since September 2, 1946 when he took over virtually as a Prime Minister, had caused immense harm to the country that it dawned upon Pt. Jawahar Lal Nehru, that, after all, Mahatma Gandhi was in the right. Speaking on Planning, he said in Parliament on December 11, 1963:

"I begin to think more and more of Mahatma Gandhi's approach I am entirely an admirer of the modern machine and I want the best machinery and the best technique, but taking things as they are in India, however, rapidly we advance in the modern age, the fact remains that a large number of our people will not be touched by it for a considerable time. Some other method has to be evolved so that they become partners in production even though the production apparatus may not be efficient as compared to modern technique."

But it was too late. He was a sick man at the time he made the above speech, and passed away barely six months after.

Governments of Latin America have committed the same mistake which our leadership did -- economic growth without employment. And with the same results -- public discontent: Chile and Uruguay, in particular, furnish two examples.

"For many years", pointed out Edgar Owens, an US Development Economist, at an international seminar organised by the Forum of Financial Writers in New Delhi in the first week of December, 1972, "GNP has been rising at 5 per cent or more in the Latin countries and manufacturing output at a much higher rate. But the proportion of the labour force employed in manufacturing has actually declined a little, from 14.4 per cent in 1950 to 13.8 per cent in 1969."

Primarily because of industry's failure to create jobs, during the 1960s, only three-fifths of the increase in the labour force in these countries was absorbed into economic activities. In sharp contrast, in labour-incentive Taiwan and South Korea, during the decade of the 60s, the proportion of the labour force employed in manufacturing doubled.

The following table worked out by Dr. K.N. Raj highlights the advantages which large-scale industry enjoys over cottage and small-scale industry:

table---on next page

	Artisan type (Traditional)	Small-scale (Semi-auto- matic loom)	Large-scale (Fully auto- matic loom)
	(Rs.)	(Rs.)	(Rs.)
Capital cost per loom	50	200	10,000
No. of looms workable by a worker	1	1	16
Capital cost per worker	50	200	1,60,000
Output per loom per day	4 Yds.	20 Yds.	80 Yds.
Net value added per loom per loom (on the assumption of 25 paise per yard & 300 working days per year)	300	1,500	6,000
Net value added per worker per year	300	1,500	96,000
Yearly wage usually ear- ned by a worker	@ Rs.1=Rs.300	@Rs.3=Rs.900	@Rs.5=Rs.1,500
Surplus per worker per year	Nil	Rs.600	Rs.94,500

SOURCE: Economic Weekly, Bombay, April 14, 1956,
p. 436.

The surplus formed in capital-intensive industry is so large that even with all sorts of ups and downs, market fluctuations, tariff policies and the like, sufficient profit would still be available to an entrepreneur whereas other types of industrial production would become uneconomic. For example, if net value added per yard is reduced from 25 paise to 12 paise, then there will be no surplus formed in cottage or traditional industry. On the other hand, the wage of the worker would be reduced to one-half or 50 paise. In small-scale industry, the surplus formed will be lowered and the wage rate will be cut down by about 15% so that the worker and the enterprise can still carry on, though there is little or no scope left for the entrepreneur to earn profits. In large-scale industry, however, there will still be enough surplus left to keep the worker paid in full besides some net income for the entrepreneur.

As a result, that is, unable to face competition from factory products, mainly, owing to their cheapness, small enterprises of low capital-intensity, particularly handicrafts, are either being forced out of work or are not coming into existence at all. Factory products are bound to be cheaper, as they are processed or produced by a machine or machines operated by power, than those produced by manual and individual labour. So that, more and more capital-intensive industries entering the field, more and

more men are becoming unemployed. Highly ambitious Five-Year Plans in our country, with undue emphasis on heavy industry, therefore, regularly show a greater volume of unemployment at the end of every five-year period than at the beginning, even assuming that the Plan is fully implemented.

Ranks of the unemployed who migrate to the cities are greatly reinforced by surplus labour on the farm. Because family holdings are becoming smaller and smaller and quite a considerable proportion of those who held tenancies during the days of the British rule but on precarious tenure, e.g., sub-tenants, share-croppers and so-called trespassers, even non-occupancy tenants of Sir and Khudkast (self-cultivated lands of Zamindars) face ejection or have already been summarily ejected. Large mechanised farms that one sees all over the country today, did not exist before 1947, but are a development of the post-independence era. They were established on the backs of lakhs of farmers who were ejected by force or fraud, and their continued existence keeps lakhs of agricultural labourers unemployed. It is these farmers - the former toilers on land - who form the core of Naxalism in the country -- the deprived, the disinherited, the under-privileged for whom no dog barked in the camps of the ruling party till yesterday. It is to be hoped

that they will bark, and bark fiercely in the camps of the Janata Party.

India along with most other developing countries of the world faces the goal of economic growth today under demographic conditions that are substantially different from those which prevailed in most of the (now) developed countries. Even in the hey-day of their industrial revolution the population growth rate in England, France and Germany remained substantially below one per cent per annum. The growth rate for the continent of Europe as a whole reached 1.1 per cent only in the first decade of the present century. Whereas the growth rate of population in the developing countries of Asia, Africa and Latin America during 1952-72 came to 2.4 per cent per annum. Hardly any of the existing under-developed or developing countries which are short of natural resources and capital and rich in labour, can, therefore, hope to develop economically by the same process which the advanced countries of today had adopted. The traditional Western model of development where agricultural development led to a transfer of labour to modern or capital-intensive industry in the cities, is not strictly applicable to over-populated economies.

In other words, in countries with dense agrarian economies as India, the idea that prosperity can be attained through a steady expansion of industrial enclaves until

they embrace the bulk of the population, and percolation, over time, of the benefits of a high rate of growth of GNP to all strata of society, is as unsound in theory as it has proved unworkable in practice. Adoption of capital-intensive techniques in a country with surfeit of labour was bound to result, and has resulted in a dual economy in our country -- a few islands of prosperity which cities signify, surrounded by vast sea of misery in the form of slums and villages.

To conclude: unemployment is India's greatest enemy. Need for its elimination is insistent or it will alternately eliminate us from the comity of civilized nations. Solution of the problem of unemployment is the key to the solution of poverty and wide income inequalities as well. Once employment of a worker is assured, inasmuch as he will be having some income, poverty will be alleviated, and income disparities with higher-ups narrowed down. So, the challenge that unemployment poses, cannot be burked. In fact, just as the morale of an army depends first and foremost on and can be judged by the care it takes of its wounded, and the risks it assumes in order not to abandon them, so can the quality of an economic policy or political leadership be judged by how it has served or proposes to serve or to uplift the under-dog, the weak, the unemployed, the speechless -- all those who are laid low and are not

sure of their next day's bread.

Most of them do not vote very often, nor do they understand what political ideology means. They do not even believe any longer in the possibility of progress; so much have they been cheated in life, and for so long. Political leadership of India, in fact, the entire Indian people will be judged not according to how revolutionary its slogans are, but according to how it deals with this section of the society. Surely, not by its access, or otherwise, to 'atomic dignity'.